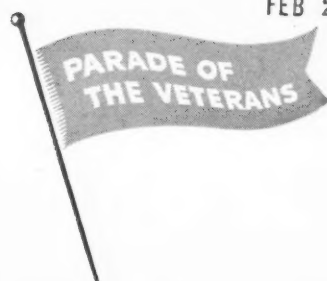


FEBRUARY 23, 1946

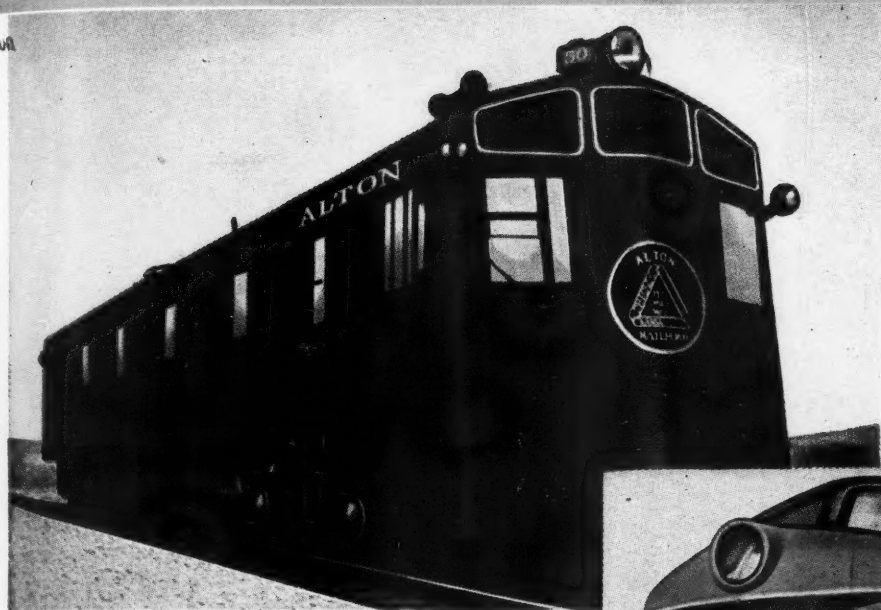
# Railway Age

Founded in 1856

FEB 27 1946



The difference between "No. 50" that powered the first Abraham Lincoln in 1936, and the 4,000 H. P. GM Diesel of 1945 tells a story that spans the evolution of Diesel power.



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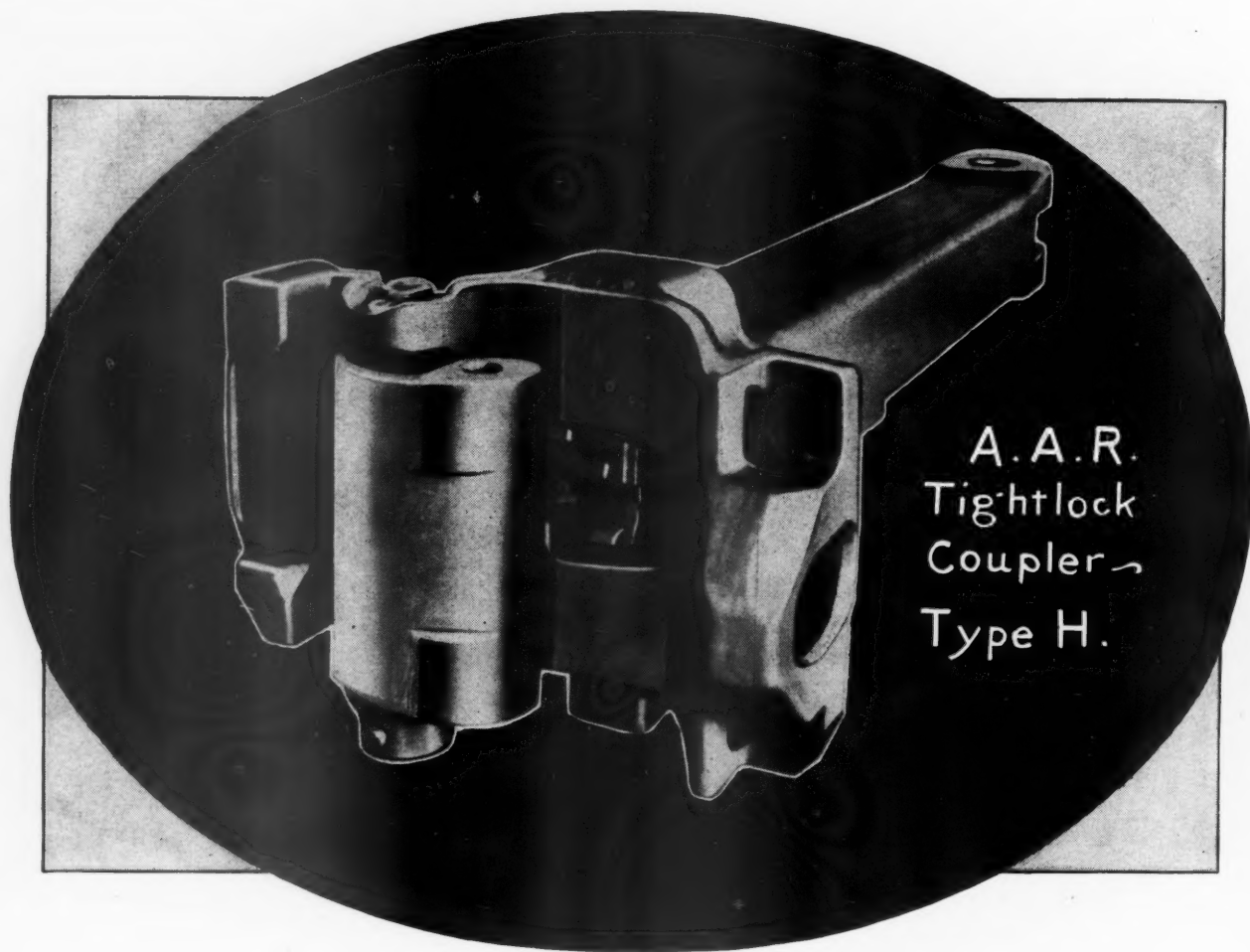
YOUTHFUL IN STAYING POWER • VETERANS FOR PERFORMANCE

## ELECTRO-MOTIVE DIVISION

GENERAL MOTORS CORPORATION

LA GRANGE, ILL.

**W**ITH THE ADVENT of the high speed streamlined passenger trains, the importance of greater safety and comfort was brought into the foreground, with the result that the Tightlock coupler was designed to meet these needs.



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Tightlock  
Coupler  
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# Railway Age

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PRINTED IN U. S. A.



# What signal systems will railroads need in 1950

## Highlights of SIGNAL PROGRESS between two wars

1913—Continuous Automatic Train Control, involving first use of electronic tubes for railroad service.

1922—Continuously-controlled Cab Signals in connection with Continuous Automatic Train Control.

1925—Four-indication Cab Signal and Continuous Train Control.

1926—Electro-pneumatic Car Retarders.

1929—Time Code Control System, established economic basis for Centralized Traffic Control.

1931—Improved Time Code Control system for C.T.C., covering 35 stations instead of the original 12.

1932—Model 31 Car Retarder.

1933—Coded Track Circuit—the first major improvement on the original Closed Track Circuit of 1872.

1937—"Union" Inductive Train Communication.

1940—Code Control system with stations connected in multiple; many services provided by one pair of wires.

1941—Coded Carrier Control for C.T.C., extending indefinitely territory which can be controlled over a single pair of wires.

1944—Frequency-Modulated Inductive Train Communication System.

Railroad development never stops, and in the next four years it is likely to set a faster pace than it has for a number of years.

Signal systems will keep pace with railroad needs. Some trends already seem clearly discernible—division-length C.T.C. sections for example, and we are supplying equipment for such installations.

Some other needs are less clear—but we are not waiting until they have crystallized. Signal systems must be ready when the railroads are ready for them.

That's why "Union" constantly studies railroad developments; why we are constantly working on new signal systems and possible signal system improvements; why we put ideas on the drawing board, test them in the laboratory, even try them out in actual railroad service long before railroad conditions require them.

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Our engineers will be glad to cooperate with you in planning to meet your present or future needs. Consult our nearest district office.

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# RAILWAY AGE

## *The Principal Factor in the Traffic Outlook*

No other factor is nearly so important in the railroads' prospects for the future as that of the total volume of production and transportation. If the total volume is large, the railroads will get a substantial share of it despite the prevailing political inequities which tend to divert from them tonnage to which they are entitled by their "inherent advantages." If, on the other hand, the total volume of production is low, the railroads can scarcely hope to prosper, even if, by some miracle, the unjust conditions under which they have to compete for traffic were mitigated or entirely removed.

### **National Prosperity and Railroad Prosperity**

Participation by railroad management, therefore, in realistic efforts to establish the political and economic environment which will foster maximum production and business does not constitute impractical idealism, but is undoubtedly the most effective traffic-promotion activity in which any management could engage. It is frequently pointed out to union leaders—seemingly with very little effect—that they have more to gain in helping to maximize the product to be divided than in concentrating all their effort on endeavoring to enlarge their share in a diminishing whole. The same warning needs to be heeded by business leaders in their rivalry with one another, i. e., their competitive struggles are praiseworthy and helpful only to the extent that they increase rather than diminish the total volume of business to be divided among them.

To say that intelligent and active participation by spokesmen for the railroads in the formulation of national and international economic and political policies, which will foster maximum production and business within this country, is a proper and practical managerial function is not, however, to say that most—or even any—of the efforts now exerted by leaders of business and industry in this direction are likely to be successful; and, hence, that the railroad industry would foster the national well-being and its own by associating itself with them. Too many of the political and business leaders arrayed nominally against the socialist elements in the present Administration in Washington have found it less embarrassing to discuss conditions in some far-off part of the world than to come to grips with socialistic tendencies at home.

Such attention to distant goals while domestic problems remain unsolved is wholly impractical, because it makes no difference what opinions Americans may have regarding foreign affairs unless the nation is strong enough economically to make its opinions carry weight. We can indulge our proclivities to tell the rest of the world how to behave, and feed hungry aliens, only to the degree that production and prosperity at home are maintained at a high level; which can scarcely be expected when we refuse to make a clear-cut decision be-

tween capitalism and socialism. Capitalism cannot go forward to maximum performance while individual enterprise has the threat of socialism hanging over it; and socialism cannot get into effective action in the United States with an overwhelming majority of the people opposing it, as they do, except where it is presented to them in some sugar-coated or otherwise disguised form. In the meantime, the Russians, with no indecision as to what they want, are proceeding to go out and get it—not tolerating traitors to their system as our diluted capitalist leadership does.

The situation in America is such that there is only one possible means of maximizing the production and wealth of this country within the lifetime of anyone now living, and that is by arousing the vigor of enterprise and investment by enthusiastic renewal of popular loyalty to the principles of private capitalism—and by obedience to these principles, especially by business leadership, even when such obedience requires the sacrifice of some immediate advantage. To be specific: While some socialistic federal power project might tempt the traffic cupidity of a railroad, far-seeing railroad statesmanship would have to deplore rather than exult in such a development in its territory—because further dilution of our capitalism with such socialism is bound to have the ultimate effect of reducing total national production. What hurts capitalism hurts national wealth and production. What hurts national production hurts the railroads. What hurts the railroads as a whole hurts them all individually.

### **No Compromise with Socialism**

And what have the railroads had to say about the recently-adopted program of the National Highway Users Conference—with the backing of prominent automotive manufacturers—demanding, among other things, (1) immunity of highway transportation from federal excise taxes, while insisting upon the continuation of large "federal aid" highway expenditures; (2) state constitutional amendments prohibiting the use of motor vehicle taxes for anything except highway purposes; (3) license "reciprocity," providing that a motor vehicle be taxed only in the state where it is registered; and (4) avoidance of tolls as a means of highway finance, thus giving actual users of expensive facilities a free service, the cost of which is coercively collected from non-users?

These four planks in the Conference program do violence to principles amply set forth in any standard textbook of free enterprise economics, yet they are propounded by an element in American industry which takes great and proper pride in its capitalist vigor. There are plenty of industrial voices raised against governmental favoritism of unions—which compromises the principles of free enterprise no more than does this program of the automotive industry. The National

Association of Manufacturers, the other day, published a full-page newspaper advertisement in which it called for curtailment of federal expenditures, but it had nothing specifically to say about "federal aid" for highways of \$500 million a year for the next three years. And what may be said—but isn't, at least by leaders in industry and transportation—of the failure of the National Industrial Traffic League to endorse the principle of toll charges upon the country's improved inland waterways?

A high level of national production and income will benefit the railroads and every other industry more than any immediately self-seeking activity in which they can engage, and, hence, a concern to achieve such maximum national production is a service owed by management to its employers. Management urges this principle upon the unions, and consistency and expediency call upon it to practice what it preaches. But obedience by management to this precept will require it to abstain from any compromise whatever with socialism, and especially from seeking selfish benefits, in its attack on business rivals; in alliances of varying degree with the socialist enemy.

An admixture of consistency, courage, and integrity would be a wonderful stimulant to the faltering and paltering campaigns now being conducted by business and industry in behalf of the principles to which they are allegedly devoted. It is a disheartening fact that there is no perverted economic program which the Administration in Washington has been able to devise for which it has been unable to find a director in the person of a relatively prominent and successful business man.

## No Radar on Trains Now

On numerous occasions since the close of the war newspaper writers and radio broadcasters have criticized the railroads for failure to visualize the use of radar as a means by which the engineman of a train can be informed of a stalled train or other obstruction on the track ahead, and thereby prevent collisions. Soon after a recent rear-end collision, the president of a railroad received a letter criticizing railroad managements for not adopting radar. Here are a few facts that may be used by railroad men to refute such criticism.

In a paper presented recently at a meeting of the Southern and Southeastern Railway Club, L. J. Prendergast, superintendent communications of the Baltimore & Ohio, said that the type of high-frequency waves used in radar are propagated in straight lines, and are reflected in straight lines, this being the principle on which radar is based. There is no way of which he knows to bend radio beams around curves. The reflector effect of large fixed structures near railroads, and the reflection from trains on other tracks, are factors which seem to indicate that the use of a radar warning device would involve difficulties. Mr. Prendergast stated, however, that many things which were classed as impossible have been accomplished, and, therefore, a prediction that radar will never be used for railroad warning devices would be foolhardy. But he emphasized that at present the problem is not solved, nor is a solution in remote prospect.

Since the presentation of the paper by Mr. Prendergast, the same general viewpoint has been expressed by W. P. Hilliard, general manager of the Bendix Radio Division of the Bendix Aviation Corporation, a large war-time supplier of radar to the Army and the Navy. Mr. Hilliard said: "The success obtained with radar in locating airplanes and surface vessels has endowed it, in the public mind, with magical properties which the facts simply do not bear out. While further research and development may eventually result in improvements which will solve the problems involved in 'seeing' around curves or behind hills, at the present time techniques and equipment have not advanced to a point where satisfactory results can be expected from the use of radar on trains."

Mr. Prendergast and Mr. Hilliard agree that future developments may solve the problem, but the important point is that no radar equipment now known will do what the public is being led to believe can be done to prevent collisions between trains. Fairness should prevent further criticism of the railroads until it is determined to what extent radar can be made useful to them.

## Cutting Fire Losses

If the article on fire prevention in our February 2 issue—by H. I. Benjamin, vice-chairman, system insurance committee, Southern Pacific—did not arouse increased interest among many railway officers in this important activity, it should have. This is not to say that fire prevention has been generally neglected in the past, but that, with railway fire losses running into millions of dollars annually, it needs intensified attention.

There still lingers in some quarters the belief that observance of suitable safeguards against fire is the concern alone or primarily of the fire prevention and insurance officers of the railroads. On the contrary, precautions against fire must be the business of every employee in every department—a realization often not adequately awakened in the individual employee.

Fire prevention officers are coming more and more to understand that, with most fires preventable, the greatest factor in attaining a good fire record on any road is the attainment of a proper attitude by the individual employee, just as the primary requisite to a good safety record lies in inculcating in all employees a due regard for safe practices. It follows that the means of stimulating greater employee interest in fire prevention—admittedly less personal with most of them than preventing injuries to themselves and their fellow workers—deserves increased attention.

As usual, the creation of a friendly spirit of competition among employees, with suitable reward for outstanding results, is one effective means for arousing employee interest, as the experience of one road, i.e., the Illinois Central, has shown. Such rivalry has long proved effective among track forces in stimulating higher maintenance standards; has shown its worth in safety campaigns; was a productive device in "traffic-winning" campaigns among employees during the depression; and, more recently, during the war, brought the desired results in scrap and bond drives.

In the case of the Illinois Central a fire-prevention



contest among the different divisions, started early in 1945 under the personal direction of the vice-president and chief engineer, has already brought about an appreciable reduction both in the number of fires and in property loss. Still more important to the railroad from the standpoint of future results, the contest has developed a markedly increased consciousness on the part of its employees in fire prevention.

It is not the thought that contests, however effective, is or will ever be a substitute for other important fire prevention measures. The experience of the Illinois Central does suggest, however, that, properly administered, the fire prevention contest may prove an effective supplement to present generally accepted practices in preventing fire losses.

## Track Awards Will Help

The railroads cannot afford to neglect any reasonable means in their efforts to achieve the higher standards of track maintenance required to permit the greater speeds and enhanced riding comfort needed to meet competition. An expedient which would seem to have considerable merit as an aid in reaching this goal is that of extending formal recognition to supervisors and foremen in the maintenance-of-way department for excellence in track maintenance. Such a practice may yield just the added incentive required to produce the kind of track that builds reputations for riding comfort among the traveling public.

The first essential to good-riding track is a structure of proper strength and design, but if this structure is not maintained to high standards of line, surface and cross-level, its full potentialities, as translated into riding comfort for passengers, will not be realized. To achieve the best results in track maintenance many factors, some of them intangible, must be given consideration. Ranking high in importance among these is the human element, and under this heading comes the desirability of giving the supervisory personnel, including foremen, an incentive to do the best job possible with the men, materials and tools available.

A number of years ago the practice was widely followed of conducting annual track inspections for the purpose of rating the different territories of a railroad on the basis of the relative condition of the tracks and right of way generally, and then rewarding the supervisors and foremen with the highest ratings in an appropriate manner—in some cases with cash awards. The coming of the depression, with the accompanying severe retrenchment in maintenance expenditures, resulted in a movement to drop this practice, until today only three companies continue to follow it.

It seems pertinent to raise the question as to whether this practice should not be revived, and on a wider scale than ever before. If properly administered there is reason to believe it would be a potent influence in helping to bring about substantial improvement in the condition of the tracks over a period of time. Any railroad desiring to institute the practice will benefit through a study of the systems in use on the Norfolk & Western, the Chesapeake & Ohio and the Pennsylvania, each of which represents the culmination of many years of ex-

perience in conducting track inspections, in correlating the results, and in making the awards.

## The Shape of Things to Come

A glance at the things the railroads are now buying gives some idea of the character of the equipment and products which the industry is counting upon to improve its service and to permit such improved service to yield a profit in the years ahead.

In the field of motive power and its maintenance there have been improvements of such a far-reaching nature in each of the three types during the past year or two as to out-mode even locomotives built as recently as 10 years ago. While it is rather early to speak with finality about such steam motive power units as the Pennsylvania's T-1's and the Q-2's, the New York Central's S-1's and such articulated units as the Delaware & Hudson's 4-6-6-4's, these locomotives have been and are doing a job of train handling that will no doubt prove amazing when all the facts are eventually revealed.

Only a few months ago most people in the railroad industry felt rather secure in the assumption that the Diesel-electric locomotive and the electric locomotive could and would probably ride along for some time to come without major design changes—that refinements of existing designs would meet the needs for the present. It was, therefore, interesting to observe that in a locomotive such as that recently built for the Seaboard by Baldwin-Westinghouse, the culmination of several years' experience in the building of locomotives, Diesel engines and electrical equipment are embodied in a unit embracing 3,000 hp. in a single cab, an electric-locomotive type of running gear which permits low axle-load limits, high traction-motor capacity in relation to total engine horsepower, and a well established type of running gear. All these things contributed to a major design change brought about by the process that the railroad industry likes best—refinement of existing mechanical and electrical design.

Only recently the Great Northern has ordered from General Electric two electric locomotives with 5,000 hp. in a single cab. An interesting comparison between the Great Northern electric and the Seaboard Diesel-electric is the fact that they both have the same wheel arrangement, the former weighing 720,000 lb. on drivers and the latter 410,000 lb.

Even in the realm of rail motor cars, in which there has been little activity since before the war, several roads are converting gasoline cars to Diesel power. This has been made possible in large part by the development of supercharging of Diesel engines, and more power can now be put into the same space originally occupied by the gasoline motors, thereby increasing the utility of equipment of this type.

Hundreds of examples such as these could be cited as evidence that progress on the railroads is not static. With plenty of public good will toward the railroads, the time is favorable for the adoption of improvements that will help to keep for the railroads as large a number of their war-won customers as possible.





Fig. 1. Punching cards from waybills on I. B. M. alphabetical printing punches at Maybrook, N. Y.

Hook-up of teletype and card-punch machines on New Haven handles all interchange reports, wheel reports and yard records, reducing time from days to hours

By J. L. BARNGROVE, JR.

Superintendent of Car Service  
New York, New Haven & Hartford

## Novel System Mechanizes All Car Records

A NEW mechanized system for handling interchange reports, train consist reports, and car records is in effect on the New Haven between its important yards at Maybrook, N. Y., and Cedar Hill, Conn.; and it is planned to extend the process to cover the entire road. This system, the first civilian adaptation of the technique of combining teletype with modern punch-card machines which was used during the

war by the Army and the O. D. T., reduces from days to hours the time required to make available detailed information of train and car movements.

In essence, the system involves creating a unit record by punching cards containing all necessary interchange and record information for each car at the interchange point where the car is received on line or (for car movements originating on line) at the first yard

equipped with machines. These cards are then used to print such reports as switch lists, inbound or outbound train consists, and interchange reports for yard use and to transmit them by wire to the "next" yard. This is done by the automatic mechanical operation of cutting tape from the cards and running this tape through the Teletype Printer to accomplish the printing and transmission. At the "next" yard, as the reports are received, a tape identical with that at the sending point is produced, from which cards, identical with those at the sending point, are automatically punched.

Thus, in effect, punched cards are transmitted by wire—making information in unit record form available at distant points practically as soon as it is available at the source. By this system data as to movement of trains and cars are centralized in the office of the superintendent of car service more promptly than can be done under any other procedure. With this information on punched cards, and by use of I. B. M. Sorting and Tabulating machines, re-

(First Card)

(Second Card)

Fig. 2. Cards punched from waybills. Two cards are required for a loaded car. An empty car requires only one card because space is not needed for origin, shipper, consignee and destination



**Fig. 3. I. B. M. card controlled tape punch.** Cards are placed in the feed hopper at the right and, as they move through the machine to the stacker at the left, tape is produced and reeled out in front of the machine



**Fig. 4. Teletype printer being operated by tape which was produced on I. B. M. card controlled tape punch adjacent on the right**

ports to show car location, car detention, etc., can be promptly prepared and used to secure better control of the movement of cars. This makes possible the prompt furnishing of car record and passing report information and is of the greatest value in permitting the distribution of cars with a minimum of wasted car-days and nonproductive car-mileage and train-mileage. This improved performance will result in operating economies and a saving of car-hire expense.

These results are achieved with reduced clerical effort because, after cards are once manually punched, all printing, transmission, and duplicate punching is automatic. Many of the hand-written reports at the yards are eliminated, as is the cutting and sorting of cut-up slips and the hand-posting to records in the car service office.

This system was developed by New Haven officers in cooperation with engineers of the International Business Machines Company. Studies first projected in 1940 by the New Haven's transportation and communication departments culminated in a definite plan in 1942, but, because of war-time priorities, equipment was not received until the latter half of 1945 for actual installation between Maybrook, Cedar Hill and the car service office at New Haven.

#### How the System Operates

From the loaded or empty car waybills, cards are manually punched at the interchange point for all cars received on line or (for car movements originat-



**Fig. 5. Cards being sorted into car number order on I. B. M. sorter**





**Fig. 6.** Cards being punched at the car service office on the I. B. M. tape controlled printing punch. It will be observed that this same machine can be used for punching cards either manually or from tape



**Fig. 7.** Consist of train leaving Maybrook being received at Cedar Hill on Teletype printer. Note Teletype reperforator making the tape which will be used to punch cards automatically at Cedar Hill



ing on line) at the first yard equipped with these machines. The information punched on these cards comprises: Car initial and number, contents, kind of car, gross tons, billing road and route, arrival train time and date, origin, shipper, consignee and destination. (See Fig. 2.) In addition, where needed, special information such as stop-offs, etc., is included. This punching is done on the I. B. M. Alphabetical Printing Punch (Fig. 1), which prints across the top of the card, simultaneously with the punching, the letters or numbers represented by the holes punched in the body of the card. This printing enables the cards to be easily read by anyone.

These cards, after being checked back against the bills and train check to insure accuracy, are then placed in the I. B. M. Card Controlled Tape Punch (Fig. 3), which produces teletype tape automatically. This tape, in turn, runs through the Teletype Printer (Fig. 4), which automatically prints a local copy of reports, such as the interchange report, simultaneously as it transmits them to the car service office and the "next" yard. Since the cards can be arranged in any desired order, the same cards which, arranged in inbound train order, are used to print the switch list and to print and transmit the inbound consist, are used again to print and transmit the outbound consist after being rearranged in outbound train order. After the cars have departed and the outbound consist has been printed and transmitted, the cards which contain both inward and outward train reference are sorted in car-number order on the I. B. M. Sorter (Fig. 5) and are filed for record purposes to be used in lieu of hand-posted yard record books.

As the reports transmitted to the car service office or "next" yard are received at those points on the Teletype Printer (Fig. 7) a tape is automatically produced which is run through the I. B. M. Tape Controlled Printing Punch (Fig. 6), automatically producing cards which are identical with those at the original point. These cards at the "next" yard are now available for use in printing and transmitting reports as was done at the "preceding" yard, while at the car service office they furnish current information and are used in the mechanized procedures involved in car location, car record and operating statistics work.

This operation, as already indicated, is now in effect between Maybrook, N. Y., an important interchange point with five connecting railroads; Cedar Hill,

**Fig. 8.** The eastbound bill rack at Maybrook. The cards are inserted in the folded bill which is being put into the rack. The cards create no hindrance in racking of the bill



## I. B. M. Teletype Operation

### AT MAYBROOK

1. Upon arrival of trains waybills are checked for diversion and worked for classification purposes.
2. Cards are manually punched from bills.
3. Switch list is printed locally for use at hump and at office.
4. Interchange report (inbound consist) is printed from tape prepared from cards and transmitted to superintendent of car service with copy to superintendent of freight transportation.
5. Cards together with bills are racked in eastbound bill rack. (See Fig. 8.)
6. Cards and bills are pulled from rack, arranged in outward train order, bills given to conductor, cards used to print outward train consist which is transmitted to Cedar Hill ("next" yard) with copies to superintendent car service and superintendent of freight transportation.
7. Cards are sorted to number order and filed for record index purposes.

### AT CEDAR HILL

1. Consist and tape of train are received several hours in advance of arrival at Cedar Hill.
2. Cards are automatically produced from tape.
3. Switch-list tape is produced from cards and held until final check against bills after train arrival.
4. After train arrival switch list is automatically printed from tape for local use.
5. After train arrival final inbound consist is printed from cards (includes any cars picked up en route) and is transmitted to superintendent car service. This is the wheel report.
6. Cards together with bills are racked.
7. Cards and bills are pulled from rack arranged in outbound train order. Bills are given to conductor, cards are used to print conductor's wheel report and outward train consist which is transmitted to "next" yard with copies to superintendent car service and superintendent of freight transportation.
8. Cards are sorted to number order and filed for record index purposes.

### AT OFFICE OF SUPERINTENDENT OF CAR SERVICE

1. Printed interchange and consist reports together with tapes are received coincidentally with transmission.
2. Printed reports go to tracing desk enabling it to furnish current information.
3. Cards are automatically made from tapes and are then used in the mechanized procedures involved in preparing special reports, home routes and other car record and statistics work.

## Comparison with Former Method

No change.

Eliminates hand-written inbound train consist containing all interchange and passing-report information (approximately same information as punched on the cards).

Eliminates hand-written switch list.

Eliminates typing of interchange reports from hand-written inbound train consist.

No change, except cards racked are with the bills.

Hand-written outward train consist eliminated.

Hand-posting of inward and outward record (2 separate postings) to index books eliminated.

This information was formerly not available until bills were received at yard office after arrival of train at Cedar Hill.

Hand-typing of car initials, numbers, weight and destination of car is eliminated.

Information as to shipper and consignee was not formerly available.

No change except cards are racked with bills.

Hand-written outward train consist is eliminated.

Hand-posting of inward and outward records (2 separate postings) to index books is eliminated.

These reports were generally several days old before their arrival at the car service office.

Eliminates telephoning yards to secure current tracing information.

Reports were generally several days old before receipt in office. The cutting and sorting of "cut-up" slips and hand-posting of records made it 3 to 4 days before they were available for use. The time taken to do hand computation-machine work, when added to the time to get reports in, made completion of statistics work much later.

an important intermediate terminal; and the office of the superintendent of car service located at New Haven. To illustrate more fully this operation the principal steps covering the movement of eastward cars through Maybrook to Cedar Hill are outlined in tabular form above, with a comparison with the old

method shown in a parallel column.

It will be seen that interchange and train consist reports are made available at the car service office both on printed sheets and on punched cards almost as soon as they are available at the source. At the car service office the printed sheets go to the tracing desk where they

are used in furnishing up-to-the-minute car-record and tracing information while the cards are put through the mechanized procedures on the sorting and tabulating machines. After the interval of a few hours required for these operations, the cards are sorted to car-number order and are filed for record reference pur-

Form 2022 (2 PART)									
DAILY INTERCHANGE REPORT OF CARS									
FROM 12.01 A.M. TO 11.59 P.M.									
FROM ERIE TO NH AT MEK ARR 8 42 NE74 ENG 3354 1 30 46 SHEET 376									
INITIAL	NUMBER	CONTENTS	ORIGIN	SHIPPER	TRAIN NO.	RR. MIN	MO. DAY	DESTINATION	
PRR	564329	LCL	B 30 ERIE	NE74 0845 0130				CH TFR CT.	
-PRR	564329		MDVL PA	VAR					
BO	276778	LCL	B 34 ERIE	NE74 0845 0130				PROV RI	
-BO	276778		AKRON O	VAR					
PFE	63913	LETT	R 41 SP-NKP-ERIE	NE74 0845 0130				BOSTON MS.	
-PFE	63913		BRAWLEY CALH B MURPHY CO	NEW ENGLAND FOOD					
PFE	34865	LETT	R 45 HIR-NKP-LIMA-ERIE	NE74 0845 0130				BOSTON MS.	
-PFE	34865		HOLTVL CAL K K SHARP CO	SWEENEY LYNES					
GN	46083	OATS	B 54 ERIE	NE74 0845 0130				WEDDFD MS.	
-GN	46083		AKRON O	QUAKER OATS CO	LAURAN S BROS				
	46083		STOP OFF PROV RI FOR PARTL UNLDG	UNLDG					
ERIE	82289	OATS	B 53 ERIE	NE74 0845 0130				SPFLD MS.	
-ERIE	82289		AKRON O	QUAKER OATS CO	ST AP TEA CO				
	82289		STOP OFF FOR PARTL UNLDG NEW HAVEN CT						
PRR	104795	OATS	B 56 ERIE	NE74 0845 0130				SHUPLI MS.	
-PRR	104795		AKRON O	QUAKER OATS	FRST L				

Fig. 9. Sample of interchange report printed on Teletype machine

OUTBOUND CONSIST 20B2 ENG 0758 0759 1 30 46									
TRAIN 20B2 ENG 0758 0759 COND HUGHES 78 LDS 3969 TONS 1 30 46									
FREIGHT TRAIN CONSIST REPORT									
MAYBROOK TO CHILL 3100 1700									
BOSTON BLOCK									
ARLX	16235	CHEESE	R 45 MSP-ERIE-IF DELY	NE74 0845 0130				BOSTON MS.	
-ARLX	16235		MARNSFLD W ARMOUR CRY	KENNEDY CO					
SRLX	4375	FMEAT	R 45 ATSF-ERIE	NE74 0845 0130				BOSTON MS.	
-SRLX	4375		ST JOE STK SWIFT CO	SWIFT CO					
MDT	19415	CFLWER	R 45 ATF-ERIE	NE74 0845 0130				BOSTON MS.	
-MDT	19415		PHENIZ ARZ LANE WHIATES	HALL COLE					
PFE	63913	LETT	R 41 SP-NKP-ERIE	NE74 0845 0130				BOSTON MS.	
-PFE	63913		BRAWLEY CALH B MURPHY CO	NEW ENGLAND FOOD					
PFE	34865	LETT	R 45 HIR-NKP-LIMA-ERIE	NE74 0845 0130				BOSTON MS.	
-PFE	34865		HOLTVL CAL K K SHARP CO	SWEENEY LYNES					
MDT	3389	CRRTS	R 42 SP-NKP-ERIE	NE74 0845 0130				BOSTON MS.	
-MDT	3389		ELROY ARZ D ARRIGO BROS	D ARRIGO BROS					
ART	22209	CARTS	R 45 SP-ERIE	NE74 0845 0130				BOSTON MS.	
-ART	22209		ELO ARZ DARRIGO BROS	DARRIGO BRS					
NE74	60132	RT R	45 TNO-ERIE	NE74					

Fig. 10. Sample of outbound train consist printed on Teletype machine

pose. The fact that these cards are available by an automatic operation almost as soon as the information is received at the source advances to a more current date the car-record and statistics work. The automatic punching from tapes eliminates the duplicate manual key-punching from hand-written reports and all the cutting and sorting of cut-up slips and hand-posting to record books of the former method.

Copies of the printed interchange and outward train consists are also sent to the superintendent of freight transportation for use in following train and car movements, checking delays, and yard operation. Of particular interest in this work is the information shown on the outward train consist (Fig. 10). The heading at the top of the sheet names

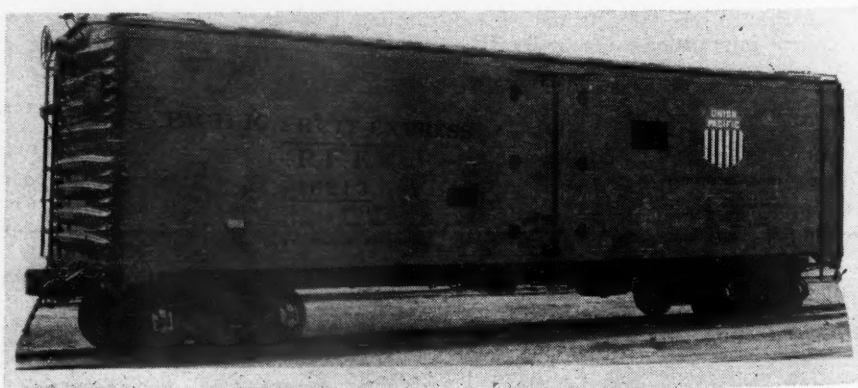
the train covered by the report, while in the body of the report, along with other information on each car, is shown the inbound train reference (Fig. 10, second column from right hand side of sheet). For example, P. F. E. 63913 (fourth car from top), which is departing in train 2nd OB-2 from Maybrook on January 30, arrived in train NE 74 at 8:45 a. m. on January 30. Thus, with the inward record shown on each car forwarded outward, information as to detention of each car is readily available. This feature of the new system has proved exceedingly valuable in checking delays and yard operation.

At the yards, the receipt of the consist of trains before they arrive permits advance planning of the work, thus expediting movement of trains and cars. Train departures are also expedited, because, with the outward train consist printed and transmitted automatically from the cards, it is no longer necessary to hold the train until the outbound consist is written.

Other advantages are increased legibility through the substitution of printed for hand-written reports, simplification and reduction in size of the reports themselves as a result, for example, of eliminating the mileage column and the cut-up slip on the wheel reports, and improvement in accuracy through elimination of the numerous manual transcriptions with the chance for transposition of car numbers. The more complete information, together with its prompt availability, has forestalled many telephone requests to the yards for passing-report information, thus relieving telephone circuits and saving the clerical work involved, as well as the interruptions in yard office work.

This system, now in operation, is planned for extension to include all important interchange points and terminals of the New Haven Railroad. Considerable improvement in efficiency, in economy, and in service to patrons can be seen as the new method is more widely applied.

\* \* \*



40-ton steel-sheathed refrigerator car

One of 500 such cars now being constructed for Pacific Fruit Express by the Mt. Vernon Car Mfg. Co., division of H. K. Porter, Inc.—40 ft. 3 1/4 in. long, the cars are equipped with convertible ice bunkers, have a capacity for 78,000 lb. and are slated for use on Southern Pacific and Union Pacific.





View of the completed fan house, showing the exhaust tubes and yard

## Hoosac Tunnel Gets New Propeller Fans

**To remove locomotive exhaust fumes and obtain more reliable and economical operation, modern ventilating units were installed by Boston & Maine to replace old equipment**

**T**HE Boston & Maine has recently completed the installation of two large electrically-operated propeller-type fans, in a new fan house, for ventilating its double-track Hoosac tunnel through the Berkshire hills in western Massachusetts. Features of this installation are the large size and type of fans and an electrical system of remote control and automatic protection. The new fans, replacing an old, inefficient ventilating fan, were installed to secure larger blower capacity, and thereby improve the air, moisture and general operating conditions through the tunnel.

Hoosac tunnel, which was built in 1875, is 25,081 ft., or nearly five miles, long, and is tangent throughout, directly under Florida mountain, and pointed almost due east and west. The old fan, which was installed nearly 50 years ago, was located in a fan house at the top of the mountain, about seven miles from North Adams, Mass., and has been used to suck air out of or to blow fresh air down into the tunnel through a central 15-ft. by 27-ft. vertical ventilating shaft, 1,028 ft. deep, driven when the tunnel was constructed. This fan was of the paddle-wheel type, 15 ft. in diameter and 8 ft. long, with axial air inlets at both sides. It had a theoretical capacity of 250,000 cu. ft. per min., and was powered by a single 2,300-volt, 3-phase, 60-cycle motor.

In later years the actual capacity of the old fan was much less than its rated capacity. Moreover, it became unreliable in operation and badly corroded, in spite of the fact that it had been rebuilt with wrought iron vanes twice in the past 10 years. Accordingly, it was planned to replace this fan with two modern fans, housed in a new single-story building. The use of two fan units, instead of one, was arranged so that one fan could be shut down for repairs, if necessary, without interfering seriously with tunnel ventilation, and the installation was made without taking the old fan out of service until the new equipment was ready for operation.

The new ventilating installation was considered necessary even though almost all freight trains now operating through the tunnel are pulled by Diesel locomotives, and although the Fitchburg division, which includes the tunnel, will soon be completely converted to Diesel operation. In fact, the accumulation of Diesel exhaust gases under heavy traffic is such that, without ventilation, severely noxious conditions would result.

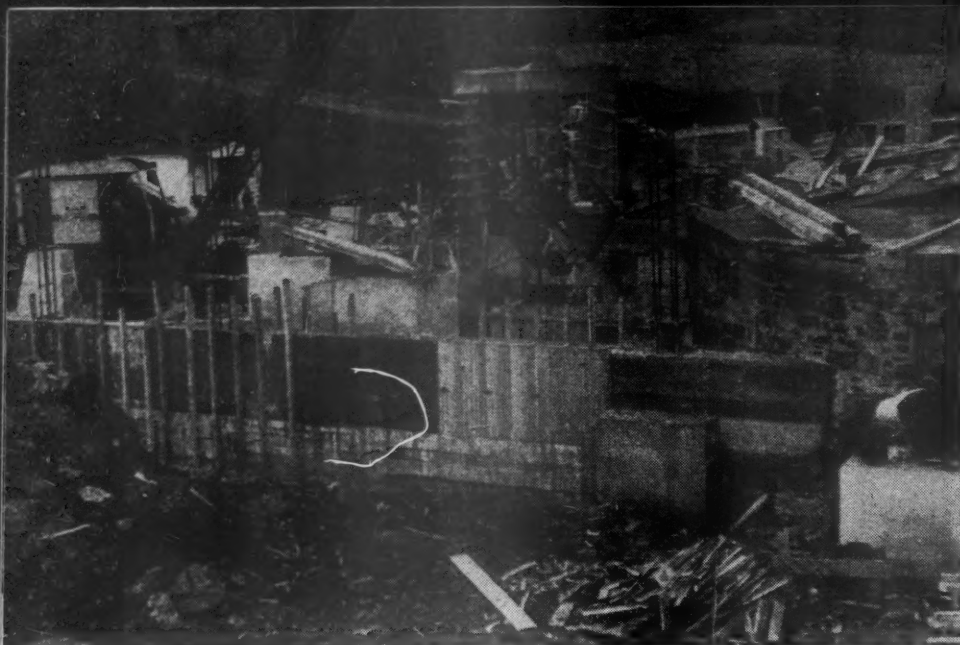
The new fan house, like the old one, covers the top of the tunnel ventilating shaft, but extends south from the shaft, whereas the old fan house extended toward the north. The new house is of brick and concrete construction and is

approximately 47 ft. by 52 ft. in plan. Its rear or north wall, which is convex, semi-elliptical in shape, extends around the edge of the ventilating shaft. The interior of the fan house is partitioned by two curved brick walls to form a plenum chamber through the center, from north to south, extending from the ventilating shaft to the fans, which are located at the southeast and southwest corners of the building, and blow toward the south. The space between the plenum chamber walls and the outer walls on the east and west sides of the building is utilized for separate motor rooms for each fan. A control room, 16 ft. by 20 ft., projects from the building on the west side at the north end of the west motor room.

### Propeller-Type Fans

The new fans are 90-in., Jeffery Type-8H Aerodyne mine fans, each with a capacity of approximately 260,000 cu. ft. per min. Each fan has eight plastic blades with adjustable pitch, by means of which they can be set at seven different angles for most economical operation without overloading the motors. The fans are located in large tapered metal exhaust tubes, each somewhat similar in shape to a gigantic Venturi tube, which extend 34 ft. beyond the south wall of the fan house and vary





During the early stages of construction. The old masonry wall around the top of the ventilating shaft can be seen at right

from 8 ft. to 15 ft. in diameter. The end of each exhaust tube is covered by a double-leaf door, hinged in the middle, which opens when the fan is in operation. If only one fan is being operated, suction closes the door of the fan not in operation, so, in effect, the doors operate automatically. Each fan propeller is mounted on a horizontal shaft supported on roller bearings, and is driven at either 390 or 590 r. p. m. by a 100-hp., Westinghouse, dual-speed induction-type motor with roller bearings, which operates on 440-volt, 3-phase, 60-cycle alternating current. The motors are located in the two motor rooms and the long drive shafts connected to the fans extend through two walls; the curved wall between each motor room and the plenum chamber, and the south wall of the fan house. Each shaft is supported between the motor and fan by roller bearings mounted on steel pedestals.

The motor bearings are grease lubricated, while the fans and shaft bearings have oil lubrication, which is piped to the bearings from an oillette located in a



Above—Another construction view, taken when the walls of the new fan house had been nearly completed. Below—Interior end of the exhaust tube for Fan No. 2, taken shortly after the fan and shaft had been set in place. Note the intermediate roller-bearing support for the fan shaft



cabinet in one of the motor rooms. With this system of lubrication, it is necessary to replenish oil and grease only about once a month. Power for operation of the motors and a lighting system is furnished by a 6,600-volt transmission line from North Adams, leading to two transformers located near the fan house. The main service and starting switches are located in the fan house control room.

Unlike the old fan, the new fans are used only to suck air out of the tunnel. They are normally operated on the basis of visibility and moisture in the tunnel, as reported to a signal tower at North Adams by locomotive engineers, track walkers or other railroad workmen. The fans are controlled electrically and can be operated either singly or together at either low or high speed, but never with one fan operating at high speed and the other at low speed. The approximate

capacities of the various operating combinations are as follows:

- 1 fan at low speed...165,000 cu. ft.
- 1 fan at high speed...260,000 cu. ft.
- 2 fans at low speed...310,000 cu. ft.
- 2 fans at high speed...475,000 cu. ft.

These capacities vary somewhat with atmospheric and operating conditions, such as the way the wind is blowing, the direction of train movements, etc. For example, two trains approaching the center of the tunnel simultaneously tend greatly to accelerate the exhaust of air up the shaft. With normal conditions, both fans can completely exhaust the air from the tunnel in 25 min.

Operation of the fans is normally by

remote control from Spragues tower, a newly constructed signal tower at North Adams. Push buttons and a carrier-current system are used, with the control desk at the tower located upstairs in the operator's room. One room in the lower story of this tower, known as the control room, is devoted entirely to the fan control equipment. This room contains a 125-volt storage battery and a 48-volt storage battery. A third storage battery for supervisory control is located in the control room of the fan house on top of the mountain. Push-button controls are also provided in the fan house control room and in each of the two motor rooms.

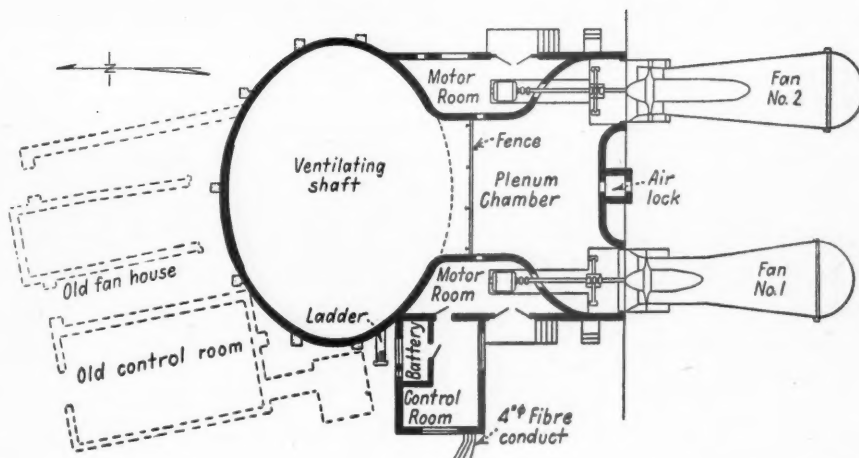
Besides the remote controls for turning on and off either or both fans, an electrical system of safety controls, actuated by thermal relays, automatically stops either fan in case of hot bearings, in which case there is a buzzer indication at the signal tower control desk. There is, also, an oil circuit-breaker in the power transmission line at North Adams, remotely controled from the signal tower, and the transformers on top of the mountain also have thermal relays which automatically shut off the power to the transformer in case of trouble and give an alarm indication at the tower.

### The Fan House

The new fan house is a substantial, trim structure. In its design, recommended A. R. E. A. standards and unit stresses were specified, generally. It has a reinforced concrete foundation supported on solid rock, including separate concrete pedestals which support the exhaust tubes. The floors, which are also of concrete poured on a compacted fill, have a minimum thickness of 4½ in. These are reinforced with 6-in. A. W. S. No. 4 welded wire mesh, and the top finish, one inch thick, contains 90 lb. to the square of Master Builders Masterplate. The floors were cured by covering them with sawdust, which was kept wet for seven days. All concrete was specified to be of 3,000-lb. strength and all exposed concrete surfaces to have a rubbed finish.

The side walls, with the exception of the doorway areas, are of brick masonry, laid between reinforced concrete columns which support the roof. The roof is of reinforced concrete construction supported by steel beams encased in concrete, and is covered by 20-year, Johns-Manville built-up tar and felt roofing. The roof areas over the control and motor rooms are insulated by a 1½-in. covering of Firtex, which was laid on the concrete with a hot asphalt adhesive before the roof covering was applied.

Entrance to the fan house is by means of a double door on both the east and west sides, which is in each case reached



Plan of the new fan house, also showing location of the old ventilating facilities

by steps and a concrete porch platform. The doors open into the two motor rooms and access to the control room is by an interior doorway from the west motor room. All doors are of the metal-covered Kalamein-process type. The exterior doorway areas between concrete columns, with the exception of the doorways themselves, are of glass block construction. The windows in the house are of plain glass in wood sash, with concrete stone sills. Inside the house, a fence, consisting of two second-hand 86-lb. rails, bolted to rail posts set in concrete, was constructed at the north end of the plenum chamber to prevent anyone from falling into the ventilating shaft.

### Construction Methods

Before beginning the construction of the new fan house a safety net of wire rope was placed over the top of the tunnel shaft and a temporary frame bulkhead was erected around the shaft, extending to the level of the proposed roof. This was made reasonably air-tight by covering it with building paper, and permitted the new construction to go on without interfering with the fan suction of the old ventilating system. The roof of the new fan house is several feet higher than that of the old fan house, which permitted construction of all of the new building, except the north wall around the ventilating shaft, but including the roof over the shaft, to be completed without disturbing the existing ventilating system.

Extreme care was used in setting the motors, fans and bearing pedestals in the south wall to insure that the drive shafts would be in true alinement. To do this, the motors, which are mounted on steel base plates, were set last, and the base plates were carefully set to the proper height by applying grout beneath them.

After the new fan house was complete, except for the north wall around the central shaft, and with the fans in-

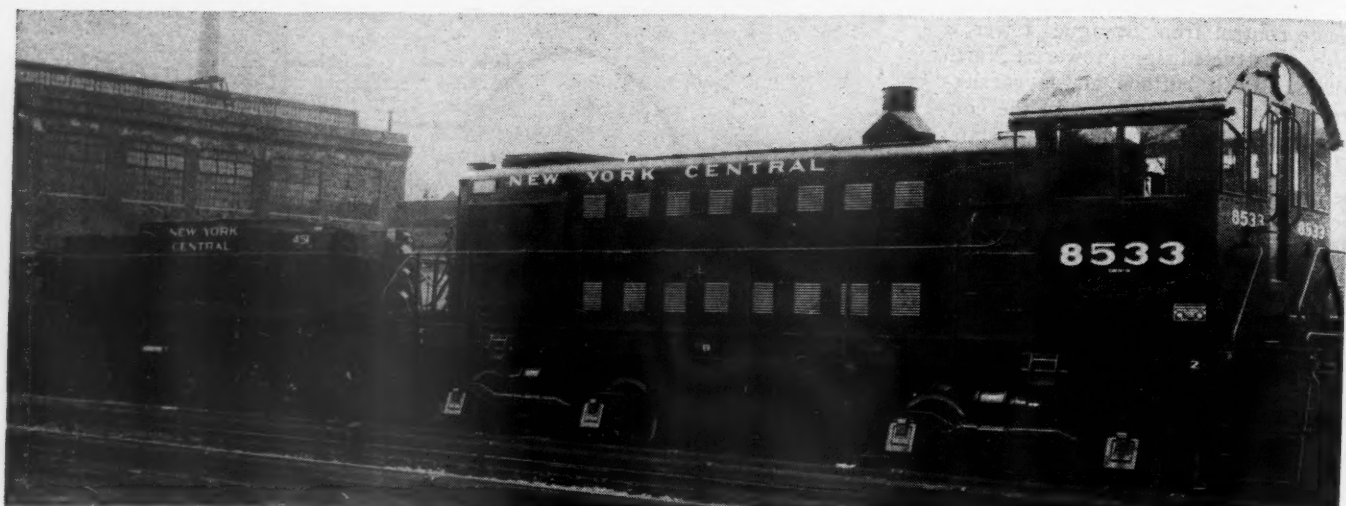
stalled and electrical connections made, a temporary bulkhead was erected inside the shaft enclosure on the north side to seal off the old fan and permit operation of the new equipment. The old fan house and equipment were then removed, and the north wall of the new fan house was completed by laying a new brick outside facing against the old masonry shaft wall. Before this was done, however, the masonry of the shaft enclosure was repaired and pointed and then sealed with shotcrete. The shotcrete, which was applied to a minimum thickness of two inches, was reinforced with 3-in. by 3-in. wire mesh.

The temporary bulkhead was then removed and the new building was painted. All interior woodwork received three coats of lead and oil paint, while all metal work exposed to tunnel gases was given one coat of asphalt-base paint and one coat of Carbozite. All other metal work was given two coats of oil-base paint in addition to its shop coat. The interior walls of the control and motor rooms were given two coats of outside-white oil paint, with the exception of a base strip 8 in. high, which was painted jet black.

Finally, the surrounding grounds were dressed with six inches of screened gravel and were enclosed by a chain link fence, with its steel posts set in concrete. Night floodlighting of the entire area is provided for by means of twelve 300-watt Benjamin Ellipto-Lite fixtures. These are mounted on as many creosoted posts, approximately 24 ft. high, which are located about 10 ft. inside the fence and about 50 ft. apart.

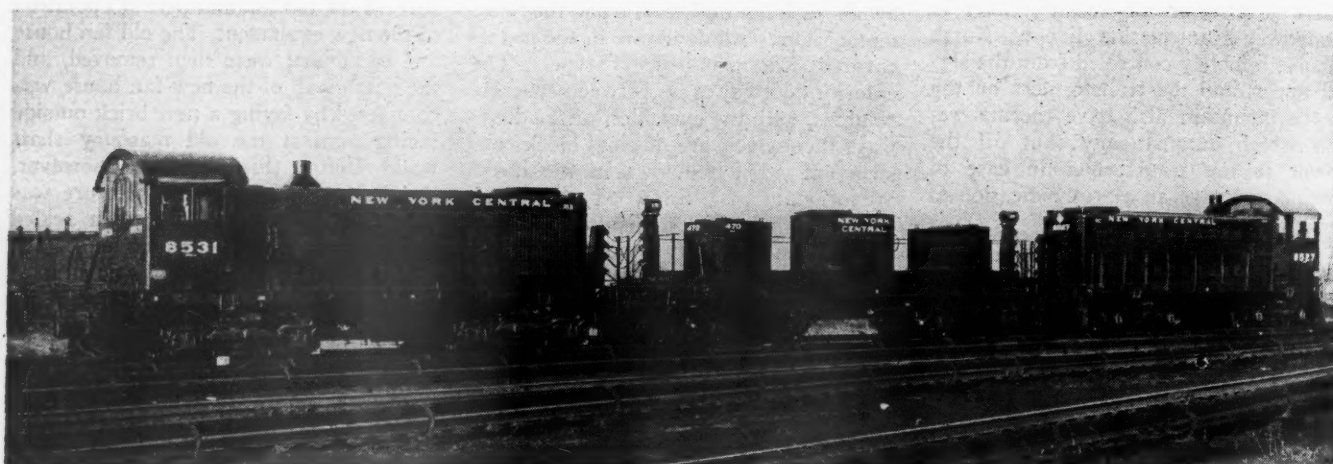
The work described was done by W. W. Wyman, Inc., Shelburne Falls, Mass., contractor, under the general supervision of T. G. Sughrue, chief engineer of the Boston & Maine, and under the immediate supervision of D. M. Burckett, electrical engineer; B. W. Guppy, engineer of structures, and J. F. Collins, division engineer at Greenfield, Mass.





Above—A single-end pusher with a 1,000-hp. locomotive

Below—Double-end pusher with two 1,000-hp. Diesel-electric locomotives



## *Diesel Trailers for Hump Operation*

**New York Central is now using Diesels, with supplementary motor capacity, as pushers in five hump classification yards**

**I**NCREASED operating efficiency has been obtained in the classification of freight trains in five major freight yards on the New York Central by the use of Diesel-electric switcher-type locomotives equipped with electric trailers. The trailers, converted from old electric locomotives, have four motors which are connected in series with those on the locomotive while pushing trains. This arrangement provides enough weight on drivers and sufficient motor capacity to give sustained high tractive force at speeds of two to four miles an hour. When the train has been pushed over the hump, the traction motors on the

trailer are disconnected and the locomotive is free to run at any speed up to 60 m. p. h., hauling the trailer.

Diesel hump locomotives, combining switcher and trailer, are now in service on the westbound humps in the yards at Selkirk, N. Y., DeWitt, N. Y., Gardenville, N. Y., and Detroit, Mich. Because of the heavier trains and a steeper grade on the hump of the eastbound classification yard at DeWitt, a hump locomotive made up of two switchers and a trailer is used.

The Mallet locomotives displaced exerted a tractive force of 95,730 lb. A single 1,000-hp. Diesel with a trailer has

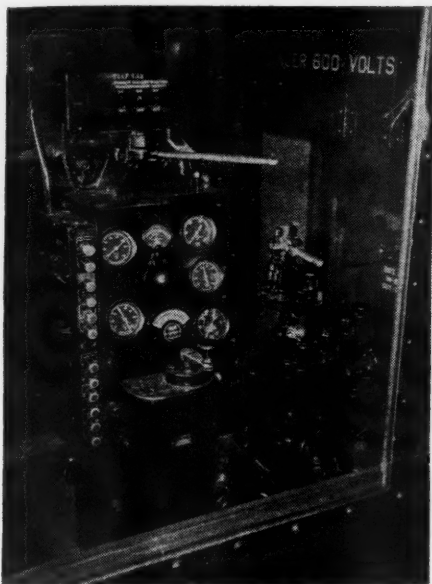
a maximum tractive force of 119,500 lb.; a single 600-hp. Diesel with a trailer develops 109,000 lb.; and two 1,000-hp. Diesels with a trailer are capable of developing 171,000 lb. The single-end trailers weigh 253,700 lb. and the double-end 266,100 lb. The single-end units handle trains up to approximately 4,000 tons while the double-end units are used with maximum trains of approximately 8,000 tons.

The single-end trailers were converted from type RA electric locomotives, the cabs being removed and replaced with housings for sanders, blower, control equipment and ballast. The ballast on



the single-end units consist of scrap rails or 4-in. plate laid on the floor casting, and concrete and steel ballast blocks over the center plate and in openings in the underframe.

The trailers have GE-286 motors.



Controller showing air-operated throttle which has been added to locomotives used with the double-end trailers

The gear ratio is  $\frac{69}{20}$ . Also locomotives were selected for this service because they have series-parallel control permitting high-speed return movements and because the locomotive and trailer motor characteristics are essentially similar. The control is interlocked so that the series-parallel connection of motors on the switchers cannot be used when the trailer motors are in the circuit.

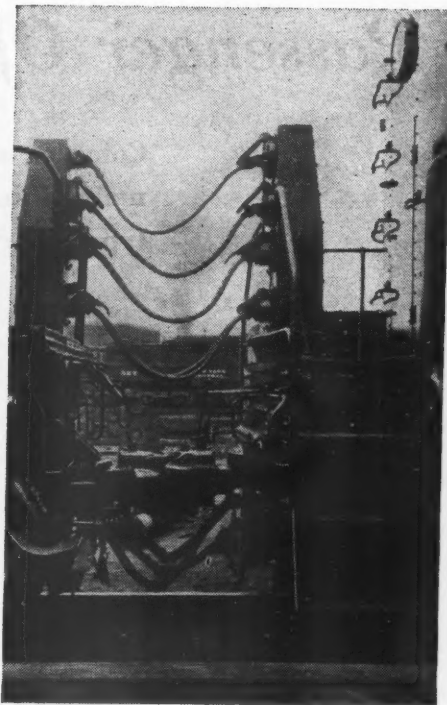
A motor-driven blower and control

equipment consisting of contactors and reverser are located in the center housing of the single-end trailers. The blower has a capacity of approximately 8,500 c.f.m. at 4-in. pressure when running at 1,260 r.p.m. and is driven by a 19.5-hp. motor from the Diesel locomotive generator. The speed of the blower varies with the generator voltage. The blower is kept running when trailer traction motors are disconnected and the locomotive is making a return trip. This assures low initial motor temperatures at the beginning of each pushing operation.

Locomotive and trailer motors are equipped for weight compensation. This consists of applying a shunt to the field of the motor driving the leading and more lightly loaded axle on each truck. It is accomplished on the 1,000-hp. locomotives with a foot switch and is automatic on the 600-hp. locomotives.

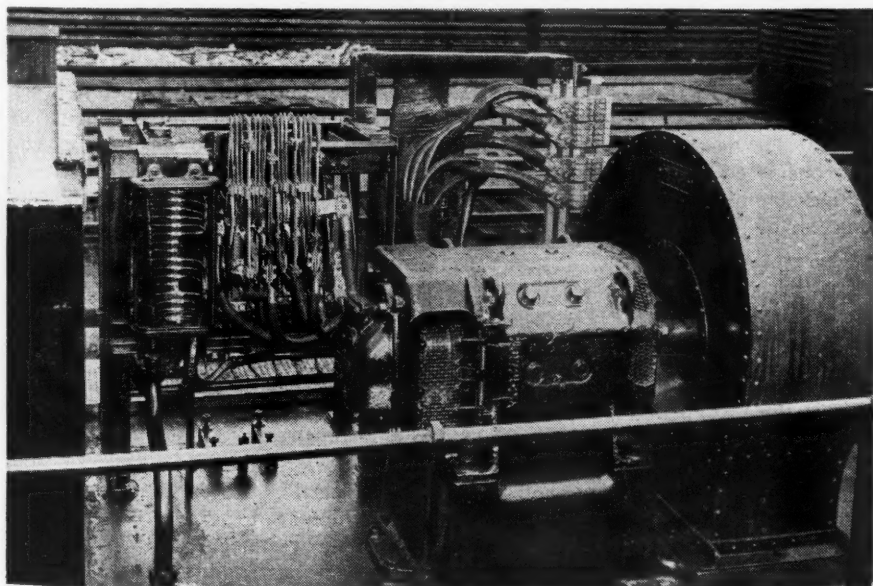
Electrical connections between the locomotive and single-end trailer are made through one 7-conductor jumper, one 16-conductor jumper, two bus jumpers and appropriate receptacles. Brakes are straight air and sanders are electro-magnetic, all being controlled from the operating position in the locomotive.

There is one double-end trailer in service and one nearing completion. The one in service was made from the original "three-power" locomotive designed for operation from a Diesel power plant or a battery on the locomotive or from the third rail in the New York electrified territory. The two 1,000-hp. locomotives are connected to opposite ends of the trailer and each supplies power to the motors on one trailer truck in addition to its own motors. Added ballast on the trailer consists of a number of layers of scrap rail, all on the top deck. Two blowers and a sand box



Connections between a locomotive and one of the single-end trailers

are contained in each end housing and control equipment in the center housing. A motor-transfer switch can be used to connect all of the trailer motors in series for operation with one locomotive only. For use with the double-end trailers, the locomotives are equipped with air-operated throttle control to secure multiple-unit operation of the locomotives.



Motor-driven blower and control equipment on a single-end trailer



#### The Beaver Returns

The C. P. R.'s beaver crest re-appeared on January 29 when President D. C. Coleman, announced a change in style of the company's trademark for use in all departments—on stationery, equipment and displays. The beaver thus is restored to the place it held from 1885 until 1929, when the plan shield motif was introduced.

# Passenger Officers Consider the Future

**Complex and difficult problems face the railways in maintaining a high level of traffic and supplying the type of service that will attract travelers to the trains**

**T**HE first meeting of the American Association of Passenger Traffic Officers since November, 1941, was held at the Edgewater Beach Hotel in Chicago on February 14-15, with President Frank L. Jenkins, general passenger traffic manager, Southern, presiding, and with 150 members in attendance. The two-day session was devoted to "brass tacks" discussion and exchange of ideas with regard to the complicated and difficult problems facing the railways in meeting revived competition. There was no election of officers, as the panel will remain the same until the 84th annual meeting which will be held in Boston, Mass., in September or October, 1946, at a date to be selected by the executive committee.

The passenger officers were welcomed to Chicago by Mayor Edward J. Kelly, who stressed the fact that no other agency can cope with the railways in their particular field of mass passenger transportation. In all of the discussion during the two-day session, a note of intelligent optimism was present. While not minimizing the extent and power of the competition which the railways will have to face, the passenger traffic officers were nonetheless quietly confident that the advantages of railway service, particularly with the new trains and innovations which are being planned, will be more than adequate to keep a substantial volume of passenger traffic on the rails.

## Public Relations Training

The all-important subject of courtesy was discussed in general, and particularly by L. W. Horning, vice-president in charge of personnel and public relations, New York Central, under the subject of "Public Relations Training for Employees." Mr. Horning said: "To satisfy the customers and to promote good public relations, the railroads must supply (a) good service and (b) courtesy and politeness. In facing a new era in passenger transportation, service without courtesy and courtesy without service are not enough; for the promotion of good public relations and attendant results in traffic, both must be supplied to the traveling public. The future success of railway passenger transportation depends on how well we measure up to the opportunities to make the public want

to patronize the railways instead of some other form of transportation."

Mr. Horning traced the difficulties which have plagued the railways through the depression and particularly during the war to prevail against attempts to supply the type of passenger service which the public demands. He continued: "Now that the war is over, the railroads are prepared to spend and are spending millions of dollars in an effort to offer the best in passenger transportation. The provision of first-class equipment is, however, only a part of the picture and it must be accompanied by exceptionally good service and employees who know how to deal with the public. With a wide variety of transportation means available to them, the traveling public is going to patronize those means of travel which actually make an effort to hold their patronage. There has been, during the war years, a noticeable let-down in courtesy. That this is true of all fields serving the public offers no excuse to the railways to allow discourtesy, which can best be counteracted by showing employees that it pays to offer a friendly and helpful attitude to travelers."

Mr. Horning then described the public relations training program which was started four years ago on the New York Central, and which has been operating since on a continually more elaborate scale. The program is now general over the entire system, and of particular interest to passenger traffic officers is that important phase of it which is known by the slogan, "CBTO," that is, "considerate behavior toward others." He described the various objects considered during the course, such as "Development of Goodwill," "Advantages of Being a Railroad Employee," "Employer - Employee Relations" and "The Employee as Part of the Public," and told in some detail of what is brought out under each heading. He also said that, in addition to giving these courses to those who come in contact with the customers directly, all other N. Y. C. employees are encouraged to take the courses as well for the reason that, in their daily lives, they are in social contact with the public and can be of great value in presenting the railways' viewpoint during such contacts.

The relationship of passenger service to freight traffic was discussed by E. G.

Plowman, vice-president in charge of traffic of the United States Steel Corporation. Mr. Plowman pointed out that the traveling public in general, and those who route freight traffic in particular, appreciate the difficulties encountered by the railways in the allotment of Pullman space during the war and in the period of heavy troop movement following the war. He said: "The time is rapidly approaching, however, when the patience of the public is likely to wear thin and industrial traffic managers, being only human, react the same. The treatment they get in buying tickets and traveling on trains has a definite influence on how they route the freight traffic which they control. The railways should develop a more adequate system of handling space assignments by telephone, particularly as regards last minute space assignments. Except for deaths or sickness, the members of the general public usually know well in advance when they are going to take a trip, whereas a busy business executive frequently does not know until the last minute and should have some means of obtaining space, if there is any available."

Mr. Plowman further stated that, while realizing the lack of an adequate number of diners and the inability to build more during the war put an insoluble problem in the railways' laps, nonetheless, the slap-dash, mass production methods of handling dining car service and food should be changed for the better as quickly as possible. "The war years," he concluded, "did much to bring railway officers and traffic solicitation forces much closer to business executives than ever before in order that they might solve their mutual problems brought about by war conditions through co-operation. This closer contact should be maintained at all costs for the benefit of transportation in general and of everyone concerned therewith."

J. V. B. Duer, assistant to vice-president operations of the Pennsylvania, brought the passenger traffic officers up to date on the latest types of passenger motive power, both steam, electric and Diesel-electric. He outlined the advantages which are to be derived from each type of power under certain conditions in handling passenger trains and, in addition to describing the latest passenger locomotives developed in the three cate-



gories named, also described the new geared turbine steam locomotive which is now being tested on the Pennsylvania.

### A Series of Forums

Forums under the subjects named were conducted by the following: A. B. Chown, chairman, Trunk Line-Central Passenger Association, on "Commissions to Tourist Agents"; C. J. Collins, general passenger traffic manager, Union Pacific, "Travel Bureaus — Railway Operated"; R. H. Clare, assistant general passenger agent, Pennsylvania, "Military Transportation and Traffic Trends"; A. H. Seaver, special assistant to vice-president traffic, New York, New Haven & Hartford, on "Co-ordination of Rail, Bus and Air Service"; E. E. Pierce, general passenger agent, New York Central, on "Railroad Travel Card System."

The western railways will not attempt to promote railway-operated and conducted tours to the national parks and other scenic spots in 1946. However, those railroads which operate travel bureaus plan to revive such tours on a large scale in 1947, when prices and man-power conditions will presumably be more stabilized. Some of the eastern railways reported that they had experienced considerable success prior to the war in railway-operated tours and would re-enter this form of activity just as soon as possible.

H. A. Hansen, manager, dining car and hotel department of the Union Pacific, assured the passenger traffic officers that, while most dining car heads report to the operating department, they were by no means oblivious to the important part their activities played in the securing of passenger traffic. He said that no one regretted the deterioration in dining car service more than dining car superintendents themselves, but pointed out the reasons for such retrogression in service, some of which have continued to exercise a bad influence even after the war was over. He pointed out that food shortages have by no means been eliminated entirely, but that as more and better food became obtainable, the dining car departments would do their best to improve the service. He stated that dining car employees are now requesting increases in pay and changes in working rules on all the railways, which will result in startling increases in the deficits shown in dining car operation. He also cited the need for increased cleanliness and sanitation as compared with the war period, and stated that the United States Public Health Service was taking an increasingly active interest in these problems so far as dining cars are concerned and had even suggested that they be consulted when plans for the construction of new diners are being considered.

The discussion on the subject of advertising passenger service was highlighted by an address by Col. R. S. Henry, assistant to president, A. A. R., who spoke as follows:

"Courtesy and service together can accomplish much, but they can't do the job unless we succeed in letting people know what we have for them. We have had a great demonstration of that in reverse through the war period.

"A representative of the American Newspaper Publishers Association has stated that no industry had come through the war with such a gain in public esteem as the railroads. That was based upon a careful study which had been made by that organization. It has been achieved in spite of the fact that our passenger contacts with the public had been overwhelming through the war, when it had been necessary for people to be crowded, for people to stand in line to get in dining cars, when people were unable to get accommodations and all the discomforts and inconveniences were prevalent, of which we are more acutely conscious, I think, than anyone else. In spite of those things we came through the war with a great gain in public esteem and public goodwill and we did it because of the intelligent way in which you gentlemen presented your situation to the people, the way in which you told them what the problem was, what the difficulties were, and what they might expect on trains. You let them understand that you were going to do the very best you could, but that best would be less in many cases than the standard to which you and they were accustomed; consequently they came aboard, not in a critical frame of mind, but with a background and foundation of understanding.

"That good will may prove enough to carry us through the very trying period of transition. The impetus of war has sagged. The sense of great effort for great ends is no longer with us. We are in the backwash—the letdown, and I am afraid our service shows it, in spots, at least. Certainly, our public is evincing something less than the same tolerance with which they met inconveniences and difficulties during the war, but at the same time we are at the beginning of the greatest possibilities we have had for many, many years in our passenger service and in our relations with the public, and our passenger service is the backbone of our relations with the public.

"There are a thousand people who come into contact with the passenger service for every one who comes in direct and personal contact with the freight service and it is personal contact that counts. Of these people, there are only a few who are regular and habitual shippers, who understand the situation. We are in close contact with them. However, there are 140 million potential

passenger customers and they don't understand. They don't know all these things that we know. It is our job to see to it to the best of our ability that they do understand; that they do know what we have for them and what we are going to have for them, and that they do understand that the conditions under which many of them made their first acquaintance with railroad travel are not to be the conditions of the future. We are not going back to normal, we are going to far better than the normal we had before, given a little time.

"The first new passenger cars of any consequence in five years will begin to be delivered this spring. More than 2,000 of them are on order now, but no great number can possibly be put in service before summer, perhaps before the end of the year, and yet we have people who want to take vacations; who have the pent up desire for travel. They not only have that natural desire, but there are such worthy promotions as a Victory Vacation Year Movement, for example, with which the urge to travel is to be stimulated. In this transition period it is a difficult problem because it seems to be that people say, 'Well, the war is over, why don't you give us the kind of service you talk about?'

"We must get people to understand in this transition period, just as we had them understanding during the war, that the things we plan take time, it takes effort and it can't be done in a day.

### A Question of Volume

"Is passenger service worth while for the railroads? That may seem a silly question, but the question has been asked before and may be asked again. The answer is to be found in the events in the past five years. Passenger service which is good enough to attract such a volume of business is eminently worth while. A railroad can make money on most undertakings, under almost any condition, if it can get enough business. Many trains cost not a great deal more than a few trains. As long as you have the trains and can put people in those cars and make them like it, you make money. You might even, as we have done in the past few years, make money without also making them like it, but it is better to make them like it, because those people who ride on the trains are the people that make up the atmosphere of friendliness or hostility. The people who ride the trains are the people who determine the future of the railroads.

"It isn't only that the satisfied passenger tends to become the satisfied shipper. The ordinary family goes through life and, with the exception of a few parcel post and express packages, has no direct contact with freight or the movement of goods on the railroad. However, those same people who ride

the trains every year control our laws, our public relations and our public policies as to transportation. They reflect in those policies their appraisal of their personal contact with the railroads and that personal contact is the passenger contact. So there can be no question that passenger service is not only worth while financially if you can give good enough service to attract an adequate volume of business but it is worth while from the point of view of getting the good will of the public, if it is the right sort of service.

"Is there a real market for railroad passenger service? Is it a market worth cultivating? Is it worth going after? People are going to travel and if we have a way that we can make them like to travel on the railroads, lots of them are going to travel on the railroads. What have we to advertise? What have we to offer in competition with other forms of transportation? We have the railroad passenger train, a unique vehicle. There is nothing else like it and can't be anything else like it. It gives spaciousness, comfort and safety to a degree that is not even approached elsewhere. With the new cars that are coming on the market, a man will be able to begin a train trip with the privacy and comfort of an individual room with that opportunity to satisfy his gregarious instinct of getting up and walking in an adjoining club car.

"We will never be able to compete with the sustained speed of the airplane, but we are going to have better speeds than we have had. We will have better power at the head end and lighter trains, just as strong, just as safe and more comfortable. We will have better tracks, better grades, fewer curves and lighter curves, better signals; we will have everything that it takes to carry on sustained, comfortable speed, and that is the thing we will have to sell.

"In a question of price competition there is no vehicle that can produce service more cheaply than a railroad passenger train if there is sufficient and adequate volume of business on the train. For that matter, there is none more expensive if there isn't a sufficient and adequate volume of business.

### The Advertising Program

"The A. A. R. advertising program was directed toward public policies of transportation. We found it necessary to keep on telling people with such illustrations as we could devise that railroads are not only essential but enterprising, progressive, competent companies doing a much better job than people generally realized a few years ago. The realization of these facts has advanced far in the last few years, especially in the war years. Most people are willing to agree now that railroads are compe-

tent, that they can do a job for this country, but we can't rest on that, we can't afford to believe that they will continue to feel that way. We can't afford to neglect the 2½ million youngsters who are growing up and coming of age in this country, and to whom the story must be told as they come along.

"This is the main purpose of our advertising and public relations program, not just to tell people that we are good, but first to create in their minds the true impression that we are competent and worthwhile, that we are a part of the community, self-supporting and tax-paying and doing a job for the country, and, second, to get them to understand the unnecessary difficulties under which railroads are called upon to do these things, to get them to realize the value to them, to the country and to the citizens of creating equal conditions, equality of treatment and opportunity among all forms of transportation.

"Passenger service advertising as I see it is most effective when it is most specific. It has seemed to us that the advertising money of the railroad industry, so far as passenger service is concerned, could be much more effectively spent by the passenger traffic departments of the individual railroads than by turning the job over to the A. A. R. On the other hand, I think that as we develop a common denominator of superior service on most railroads, it should be possible for us to find illustrations of railroad progressiveness, railroad importance, and the economy of railroads to the people of this country in the passenger service.

"We are in the transition time, facing either great difficulties or great accomplishments and triumphs in the passenger service. All of us here know and most people now realize that it is eminently worthwhile for the railroads to develop that passenger service to the utmost. There is money to be made under proper conditions and there are friends to be made. There is a great passenger market and we know that in the passenger train of the near future, the kind of passenger train we all look forward to, we have a vehicle from the point of view of price and service that can meet and compete within its proper field any other passenger carrying vehicle now in existence or now within the imagination of any man living. We know that we can produce the service, and we know that we should be able to produce the courteous, friendly treatment of the passenger which is so important, and we know that among us all we can advertise and tell the public what we have for them, and when we do, we will get the business.

C. E. Johnston, chairman, Western Association of Railway Executives, who was scheduled to address the dinner on February 14, was ill and could not ap-

pear. Therefore, his address, under the subject of "Winning a Place in the Future," was read by Joseph H. Hays, counsel for the W. A. R. E.

"You passenger traffic officers are now claiming a magnificent war-time record. I am sorry that you will not have time in which to relax and enjoy it. I have every faith and confidence in your leadership and with good reason.

"The first impact of serious competition from other modes of transportation was borne by the passenger departments of the railways when the automobile became commonplace and when huge public expenditures on inter-city highways made possible the expansion of personal transportation by motor bus. In a sense, you were caught with 'too little too late.'

"Despite this handicap, and despite the depression and recession of the 30's, you were well along on the upgrade before the advent of World War II. In fact, in the eight years prior to the second world war, you had doubled your passenger revenues. You had what it took. Today you are foremost in this matter of competition between and among modes of transportation. Your group carries and will continue to carry a great responsibility through the hectic period of readjustment which lies ahead."

### More People Must Ride

"Competition will be keen and directed at the spots where there is the most potential traffic. Railway competitors operate mainly in select fields and supply service between the points where there are the best traffic possibilities. However, the railways will continue to be under obligation to furnish a great deal of passenger service on lines where traffic is lean. In this field, the private automobiles will continue to be the toughest competitors. Means must somehow be found, however, to reduce passenger train service to the lowest practicable limits in the lean sections or to get more people to ride the trains that serve these sections.

"Concentration on building up train loads may well develop an answer to part of the problem ahead. An increase of about 400 per cent in passenger volume in the war years was accommodated with an increase of only about 22 per cent in passenger train miles. Increased passenger train load manifestly is an important factor in adding to net earnings.

"Railroad men have overcome obstacles and difficulties," Mr. Johnston concluded, "ever since the first rails were laid on this continent. As railroad men, we should believe in ourselves and in the railroad industry. Surely what the railroad industry has done warrants supreme confidence in what it will be able to do."



## Coach Seats

Three new styles of coach seats, two for daytime service and one for day-night use, have been developed by the Heywood-Wakefield Company, Gardner, Mass. All of the seats are of "Sleepy Hollow" construction, the principle of which was formulated as a result of the analysis of data collected by Dr. Earnest A. Hooton, Harvard University anthropologist. The seats and backs are made in one piece and are shaped to fit the body, following his recommendation that the body should have support from head to toe. All seats have an internal construction utilizing rubber cushioning material.

A calf rest is fitted into the back of the day-night seat and may be pulled down for use by the person occupying the next seat to the rear. The calf rest is held down by the weight of the passenger's legs; when the feet are removed, a light spring mechanism automatically returns the rest to the concealed upright position. The adjustment of the seat to nine reclining positions and the one-piece construction of the seat cushion and seat back, the latter giving full support to the base of the spine, permit the extension of the seat cushion out to meet the calf rest when the seat is tilted back in position for sleeping.

A radio speaker is built into the face rest and is controlled by a dial on the inside end standard, a separate dial being located on each side of a double seat. The speaker may be used for radio reception or may be tuned in for train announcements of time changes, approaching stations, or mention of points of interest en route.

One of the daytime seats is essentially



Heywood-Wakefield "Sleepy Hollow" day-night seat has a one-piece cushion, radio speaker in the face rest, and a pull-down leg rest

the same as the day-night seat except that it has no face rest, radio, or calf rest. It is fitted with an adjustable foot

rest to accommodate the nine reclining positions.

The other daytime seat is more of a



Tubular-frame seat designed for short passenger runs—The tapered back increases the aisle space



Heywood-Wakefield daytime seats have nine reclining positions and an adjustable foot rest

a "commuter" seat, being designed for relatively short trips. It is built with seamless-steel tubing and has the back tapered in to allow more aisle space, both features being designed particularly for heavy traffic conditions where the aisles get maximum usage by passengers moving in and out of the cars. The seat reclines to nine positions and has adjustable foot rests. End standards are of pressed steel and arm caps are plastic.

All three seats are reversible, rotating on centers. The day-night seat weighs approximately 200 lb. and is spaced on 52-in. centers; the first daytime seat, 170 lb. with 41-in. centers; and the seat with tubular frame, 150 lb. with 39½-in. centers.

# Clement Sees Need of Freight Rate Rise

**In Pennsylvania's annual report, he says taxes take over half of what is left after wages and other prior charges. Points to large rehabilitation expenses to be met from post-war earnings**

THE 99th annual report of the Pennsylvania, made public on February 19, emphasizes three important factors in the railroad situation which have a substantial bearing on the kind of public service the railroads would like to perform. One is the trend of business—volume decreasing and costs increasing. Another is taxes, which on the railroads generally amount to more than half of what is left after paying wages and other prior charges. The third factor is the attempt of the Department of Justice to interfere with the normal process of rate-making, an attack which can be terminated only if Congress passes the Bulwinkle Bill, which will remove any possible legal basis for the Justice Department's anti-railroad campaign.

## Deficit Operations Feared

"The railroads," says the report, "were granted a 5 per cent increase in freight rates in May, 1942, which is under suspension until six months after the legal termination of the war; but, as the situation appears to be developing, it will probably be necessary for the railroads to petition the Interstate Commerce Commission for an increase greater than that under suspension, in order to meet greatly increased expenses and avoid deficit operation."

"Large expenditures must be made for the rehabilitation of the railroads. All of these necessities will require money in large amounts. Money requires credit, and the credit of the company is very much affected by the rates at which the business is carried."

Discussing subsidized competition and taxation, M. W. Clement, president of the road, observes in the report: "The country's vast system of airways, highways and waterways will be expanded at the government's expense, while all of the improvements for the railroads will be privately financed. The railroads want no subsidy; they want equity. They are a heavily taxed industry competing with subsidized industries, and all they ask is equality of opportunity. Nationally, the railroads, after providing for operating expenses, interest, rentals and other necessary charges, have been giving up over half their remaining income to taxes, and this has its effect on maintenance, rates and service."

"The Pennsylvania during the war years paid in taxes, and disbursed for improvements and repairs to meet the war load, a sum of money equal to the entire debt upon the property. A national railroad system without any debt would place the railroads in the same position as their competitors, as the government furnishes a large amount of the capital for the waterways, the highways, and the airways."

"There was much deferred maintenance during the war period. The Interstate Commerce Commission gave the railroads authority to create reserves to meet this situation. The taxation system, however, would not permit them to take any tax benefit on reserves so created, and money that should have been set aside for this purpose was taxed the same as other income. Deferred maintenance must, therefore, be paid out of post-war earnings, and the more the post-war earnings are siphoned off through taxation, the less will be the money the railroads can spend on rehabilitation and improvements."

Concerning the labor situation, Mr. Clement says in part: "On the whole, railroad labor has continued to be well-disciplined, faithful to its trust and its standards of good citizenship, but it expects a recognition on the part of its employer that its position in the American economic structure shall not be unduly disturbed by what is happening all around it. That position is being expressed in the wage negotiations now being carried on through collective bargaining, mediation, arbitration and fact-finding between men and management in the railroad industry."

## Favors Bulwinkle Bill

Passage is strongly urged of the Bulwinkle Bill, H. R. 2536, which would put an end to efforts of the Department of Justice to regulate the making of freight rates by anti-trust suits, and to prevent the railroads, though recognized by Congress as a national transportation system, from conferring on rate matters as they have for many years, with full approval of the Interstate Commerce Commission. The bill has passed the House by a large majority and is now pending in the Senate.

Concerning the National Transportation Inquiry, instituted by a subcommittee of the House Committee on Inter-

state Commerce, the report commends the explanation made to the House by the committee chairman, Clarence F. Lea, of California, as to "the necessity for an adequate, economical transportation system, and the need for legislative action to help solve the many complex problems facing the industry."

Business done by the Pennsylvania during 1945 remained at a high level, but, due to the cessation of war industries and stoppages of production as a result of labor disturbances, operating revenues declined \$73,562,501. Net income, amounting to \$49,008,238, declined for the third successive year, and was \$15,712,193 less than in 1944, \$36,410,246 less than in 1943, and \$52,460,555 under 1942.

Operating expenses increased \$47,628,686, and absorbed 83.71 per cent of operating revenues as compared with 72.90 per cent in 1944. Included in operating expenses was \$41,395,479 covering the unamortized portion of the cost of emergency war facilities. Taxes, after credits of \$24,443,381 for prior war years, aggregated \$54,340,013. From the net income, \$3,680,996 was appropriated for sinking funds and other purposes and dividends were paid amounting to 5 per cent, or \$32,919,385, as in the three preceding years. The balance, \$12,407,857, was transferred to profit and loss.

During 1945, the Pennsylvania's debt in hands of the public was reduced by a net amount of \$10,279,967, making a total reduction of \$148,670,000 in the past six years. Refunding operations during the year included replacing three issues of bonds having a face value of \$149,732,000 with lower-interest securities, and will produce ultimate interest savings approximating \$47,000,000. Rentals for leased roads, interest on debt and other charges decreased \$2,361,361. The return on the investment in road and equipment during 1945 was only 3.09 per cent, compared to 3.92 per cent in 1944, 4.62 per cent in 1943 and 5.35 per cent in 1942. There was a net increase in road and equipment investment of \$3,291,035.

As the year 1946 marks the centennial anniversary of the Pennsylvania, the text of the report is accompanied by a foreword briefly summarizing the development of the company. It was chartered under an act of the Pennsylvania legislature, approved April 13, 1846.



# GENERAL NEWS

## Bowman to Head Merged P.M.-C. & O.

Directors approve combine  
and plan now goes to  
I. C. C. for action

On February 20, directors of the Chesapeake & Ohio and of the Pere Marquette unanimously approved and signed an agreement of merger embodying the terms and conditions for uniting the two roads. Robert J. Bowman, president of the Pere Marquette, was elected president of the combined railway. He thus will succeed Carl E. Newton, who last month announced his resignation as Chesapeake & Ohio president to return to the practice of law with the New York law firm of Donovan, Leisure, Newton & Lumbard, which he left in December, 1942, to head the C. & O. in the war emergency. Mr. Newton's resignation will become effective at the annual meeting of the company on April 23, at which time the merger agreement will be submitted to C. & O. stockholders.

Mr. Bowman and Robert W. Purcell, vice-president and general counsel, were elected to the C. & O. board. The board also named candidates as directors to be presented to the stockholders for election at the annual meeting of the company. Mr. Newton requested that his name be withdrawn from nomination to the new board. With this change and the addition of Messrs. Bowman and Purcell, the new board will include all present incumbents.

Robert R. Young, chairman, was elected chairman of the merged company. All vice-presidents of both companies will hold similar office in the merged company. An application will be filed with the Interstate Commerce Commission, probably next week, for authority to weld the roads together as constituents of an enlarged Chesapeake & Ohio system. Pere Marquette stockholders will vote on the merger at their annual meeting in Detroit, Mich., on May 7.

The system created by the merger would total approximately 5,000 miles of main-line mileage. It would embrace lines from Newport News, Va., and Washington, D.C., via Columbus, Ohio, to Toledo, and via Cincinnati, Ohio, to Chicago, and a line, north of Lake Erie, from Buffalo, N. Y., into Michigan. Throughout the lower Michigan peninsula the Pere Marquette has a network of lines, linked by car ferry service with the west shore of Lake Michigan, where traffic is interchanged with carriers serving the northwest.

As the medium for effecting exchange of Pere Marquette prior preference and preferred stocks for stock of the Chesapeake & Ohio, the latter company will

## Wage Arbitration Hearings Recessed 4 Days

Arbitration hearings in the wage cases of the 15 non-operating railway labor unions and the three operating organizations opened in Chicago on February 18, as scheduled. An immediate motion for a recess until February 25 was made by the representatives of the employees in order to permit them to hold conferences with government officials in Washington, D. C., to determine the effect on the railway wage cases of President Truman's wage and price stabilization directive of February 14. The carriers' representatives stated that, although they were ready to proceed with the case, they had no objections to the recess. However, the arbitration boards set February 22 for reconvening the boards.

create an issue of three and one-half per cent cumulative, convertible preferred stock. This stock will be convertible into 1.6 shares of C. & O. common, which fixes the conversion price at 62.50, and will be redeemable at 105 per share on November 1, 1950, or any dividend date thereafter, plus accrued dividends.

The terms of exchange embraced in the agreement approved by the boards of the two roads are as follows: Each share of prior preference stock of the Pere Marquette to be exchangeable for one share of 3½ per cent cumulative convertible preferred stock and one-third of a share of common stock of Chesapeake & Ohio. Each share of Pere Marquette preferred stock to be exchangeable for eight-tenths of a share of 3½ per cent cumulative convertible preferred stock and four-tenths of a share of common stock of the Chesapeake & Ohio. Each share of Pere Marquette common stock to be exchangeable for one-half of a share of C. & O. common.

## January Operating Revenues 15.3 Per Cent Under 1945

From preliminary reports of Class I railroads representing 80.8 per cent of total operating revenues, the Association of American Railroads has estimated that the January, 1946, gross amounted to \$514,020,023, a decrease of 15.3 per cent below the \$606,895,072 reported for the same 1945 month.

Estimated January freight revenues were \$362,737,613 compared with \$448,239,051, a decrease of 19.1 per cent. Estimated passenger revenues were \$111,074,810 compared with \$113,413,306, a decrease of 2.1 per cent.

## Sees No Early Relief in Box-Car Squeeze

Kendall says easier conditions will not come until  
harvest is completed

Looking over the transportation requirements of the government's export program and the large quantities of grain and grain products to be moved for domestic purposes, Chairman Warren C. Kendall of the Car Service Division, Association of American Railroads, sees "little, if any, relief so far as box car supply is concerned until after completing this year's harvest." Mr. Kendall thus appraised the box-car situation in the latest issue of his monthly report on the "National Transportation Situation," which also noted the continuing tight refrigerator and coal car conditions.

On the other hand, the situation with respect to passenger cars has eased materially with recent decreases in arrivals of military forces from overseas and the receipt of 800 additional troop sleepers by the Pullman Company. These favorable developments, Mr. Kendall pointed out, have paved the way for the complete removal of restrictions on the operation of sleeping cars on March 15. He also revealed that it has been possible to return to owners most of the coaches allocated to assigned service from the West Coast ports.

**P. O. W. Movement**—Another development in the military transportation situation has been the recent order extending for 60 days the contracts for prisoner of war labor, Mr. Kendall pointing out that this will no doubt reduce the movement of prisoners in the next two months. At the same time he stated that the carriers were prepared to fulfill their commitment of moving 85,000 prisoners per month. He also mentioned arrangements for handling the war brides and children now being brought to this country. "The movement of these dependents," he said, "will be handled by the chief of transportation, there being complete coordination between the Army and the carriers as on all other military movements." Meanwhile preliminary discussions are now being held to formulate plans for the return of the bodies of those in the armed forces who lost their lives on foreign soil.

Mr. Kendall's general discussion of the freight car situation said that conditions "did not ease materially" in January when a slight improvement in the turn-around time was accompanied by increased car detention and continuance without abatement of heavy demands for box, refrigerator, and coal cars. After discussing in some detail the grain-movement situation, for the

(Continued on page 413)

## U. S. Must Charge for Its Transportation

Norris says it's hard for RRs. to sell something U. S. is giving away

E. E. Norris, president of the Southern, in a Somerset, Ky., address on February 14 explained to his Chamber of Commerce audience some of the political conditions which must be corrected if the American people are to continue to have, under private ownership, the quality and quantity of railroad service they need.

"In its essentials, today's railroad is the same as the railroad of 1830," Mr. Norris said. "There have been spectacular and continuous improvements in plant, equipment, and methods. But it is still a road of rails. And people and freight still are moved in flanged-wheeled cars coupled together in trains and pulled by one powerful machine. The simple fact is that no one has yet found a better and more economical way to provide the American people with complete, uninterrupted, nation-wide, all-weather common carrier service in the transportation of passengers, freight, express and the mails.

"In recent years, we have seen the development of new forms of transportation by land and air, and the revival of inland water transport. But, even with this subsidized competition, the privately-owned, privately-operated, tax-paying railroads have continued to perform the bulk of the nation's transportation service. In normal times, the railroads perform about two-thirds of all the freight service of the nation, and handle more than half of the commercial passenger traffic. In wartime, the services of the railroads are indispensable, as World War II has shown. For example, 97 per cent of all organized troop movements within the United States were made by train, and more than 90 per cent of all war freight was hauled by rail.

"The successful defense of the nation in wartime; the uninterrupted operation of industry; the orderly and systematic flow of products from farms, forests, mines and factories; the continuous flow of export and import traffic through our seaports; the lives of 140,000,000 Americans—all these depend upon the availability of adequate railroad mass transportation service.

"If you want to preserve this self-supporting, tax-paying agency of transportation—ready and able at all times to provide modern and adequate service—you must give it a fair and equal chance to carry the nation's traffic for which they are economically best fitted on the basis of true costs and service.

"Whenever I hear praise of railroad performance today, and look back to the unfair competitive conditions which plagued the railroads before the war (and still do), I remember the story of the rabbit being chased by a dog. People were following the rabbit and urging it to run harder and thus escape, when the rabbit turned and said: 'Thank you for your kind encouragement, but for goodness sake shoot that dog.'

"The biggest threat to the railroads lies

in the government's continued investment in huge sums in transportation facilities for the use of our competitors who are not required to pay adequate user charges. In the case of the railroads, they own and maintain their own tracks and terminals—as well as their cars and locomotives—and they pay heavy taxes on them. Ninety-eight per cent of the money invested in railroads came from private investors; and, incidentally, three-fourths of the total investment in railroads is in the fixed roadway.

"In this respect, the railroads business is unique among transportation enterprises. Other forms of commercial transportation provide their moving vehicles—the boats, the planes, the motor trucks—but the permanent plant, the fixed ways on which they operate, are almost wholly the product of funds raised by public taxation. The taxpayers spent more money on such transportation facilities in the last 20 years than private investors have spent on our whole railway plant in the United States in more than a century.

"Certainly those who use publicly-built facilities for commercial transportation purposes should pay suitable user fees to reimburse the taxpayers who put up the money. And, in addition, they should pay taxes for the general support of government, as the railroads do.

"An inspiring sign that we are clearing up our thinking in regard to transportation is to be found in the six basic principles recently evolved by the Southeast Shippers Advisory Board. These principles, which the board asks Chairman Clarence Lea of the House Committee on Interstate Commerce to have considered in the interest of service to the public, are:

(1) That the Congress shall establish a general policy of private ownership and operation of all domestic transportation.

(2) That the Congress shall establish a policy of safe, adequate, economical and efficient domestic transportation.

(3) That the Congress shall establish a policy of removing all legal barriers to the development of such domestic transportation.

(4) That the Congress shall establish one regulatory body governing all domestic transportation executing the policy of Congress.

(5) That the Congress shall establish a policy that all transportation be self-sustaining.

(6) That the Congress shall recognize the profit motive in transportation so as to insure a fair return to private investments in such domestic transportation.

"In those soundly-conceived, concisely-stated basic principles you will find the answer to how you may establish equality in transportation; to how you may secure the best transportation service at the lowest real cost."

### A Correction

Automatic Transportation Company wishes to correct two errors in its advertisement in the February 9 issue of *Railway Age*. The statement, "Only Transporter has this Front Wheel Power Drive", should have read, "All Transporters have this Front Wheel Power Drive". In the following statement, "The Transporter is the only material handling electric truck that provides maximum power for a full day's hauling and yet uses only an ordinary light socket for 5-hour recharging", the phrase "5-hour recharging" should have read "8-hour recharging".

## House Committee Gets B. H. Meyer's Views

Response to transport inquiry questionnaire is filed by former I. C. C. member

Creation of a panel from which the President would make appointments to the Interstate Commerce Commission or explain his failure to do so when he submits the name of a non-panel nominee to the Senate is recommended by former Commissioner Balthasar H. Meyer in his response to the questionnaire whereby the House committee on interstate and foreign commerce is gathering material for its "national transportation inquiry." Mr. Meyer, who is now engaged in private practice as a transportation consultant at Washington, D.C., was a member of the I.C.C. for more than 28 years prior to May, 1939.

**Practitioners to Name Panel**—As he visualizes his proposed panel it should always contain about 10 names, the list to be prepared "by a body of men competent to judge" and the selections made "without consideration of political affiliations or activities," competence for the job being the "only test." Mr. Meyer named the Association of Interstate Commerce Commission Practitioners as the body "best qualified to prepare and maintain this panel."

His further comment on the commission included a suggestion that there should be a pension plan for commissioners, and an expression of opposition to any reorganization of the regulatory body by Congress, although he conceded that there is need for internal reorganization from time to time "to better adjust the machinery to the present work." That kind of reorganization "should be left to the Commission itself because the Commission can do it better than Congress," Mr. Meyer said.

With respect to the size of the commission, Mr. Meyer noted that the original membership of five has now grown to eleven. His own experience "points to seven as the number which combines the highest degree of efficiency in operation with the highest degree of soundness in conclusions." Meanwhile he recognized that where a commission acts through subdivisions, as the I.C.C. does, "a much larger number than seven is required to furnish sufficient members for the necessary subdivision."

**Should Report to Congress**—Earlier in his presentation Mr. Meyer had responded to that part of the questionnaire which called for comment on "advantages and disadvantages of a single regulatory body for all forms of common carriers, reporting directly to Congress." The former commissioner was attracted particularly by the phrase "reporting directly to Congress," for he regards reporting to Congress as "vital." Thus he seized the opportunity to advise the committee of New Deal efforts to have the commission "clear" its reports through the executive branch of the government. He said that after the commission had proceeded for half a century (as he assumes it "still does") on the theory



that its reports should go directly to Congress, it began to receive "intimations" that "it would be desirable to confer with executive departments before sending the annual report to the printer."

"As the years went by," Mr. Meyer continued, "these intimations developed into requests and finally the requests became demands. In the most extreme cases within my personal experience, rejection of the demand was followed by a vehement appeal to the President by a member of his cabinet. It should not be necessary to argue that the annual report to Congress should be the voice of the I.C.C., as directed by the act, and of no one else, and that never should the commission be made an organ pipe for strange voices."

"A practice or a statutory requirement that the annual report of the commission be submitted to some branch of the executive departments for approval before submitting it to Congress strikes at the independence of the commission. I should think that Congress would desire to insist upon a free and independent expression of its views and thus aid the commission in preserving a real arm of Congress. I believe that a report from the commission reciting developments along these lines during the last ten years would aid the committee and be of great public interest."

**A Single Agency**—With respect to the advantages and disadvantages of a single regulatory body for all forms of common carriers, Mr. Meyer said only that the "outstanding disadvantage" would be the "size of the official field which each member of the regulatory body must master, even with the aid of adequate internal reorganization, to keep pace with changes in the work." However he had previously said that separate regulatory agencies tend to become partisans of the carriers they regulate; and "from the standpoint of the public interest such a tendency would be a disadvantage." Regulation, Mr. Meyer added, "has in view proper recognition of all interests which a multiplicity of agencies is inherently incapable of accomplishing. Such a plan implies a degree of mutual understanding and cooperation which is unattainable in practice."

Meanwhile, the former commissioner had expressed his satisfaction with the Interstate Commerce Act's present statement of the national transportation policy. On the matter of regulation, Mr. Meyer assumed that the committee's studies would be confined to common-carrier transportation, excluding private transportation except with reference to such subjects as "safety, sanitation, nuisances, etc." He approved that approach, saying: "In the last analysis, private transportation is the most powerful and therefore decisive potential competitor in the entire field. It places a limit on the services performed by all competitors and the rates charged therefor. It has it within its power to prescribe rigid limits for all common carriers. From the standpoint of the shipper it preserves for him a most valuable element of freedom of action. Private transportation is the final arbiter and should be left free, except as noted above," i.e., except as to such matters as safety, sanitation, nuisances, etc.

#### Exemption from Anti-Trust Law—

Exemption of common carriers from the application of anti-trust laws where their activities are under the supervision of a regulatory agency is favored by Mr. Meyer—"subject, of course, to prior approval on a public record and adequate conditions when necessary, together with subsequent re-examination of the questions presented either on complaint or on the initiative of the regulatory body as now provided by the act with reference to other subjects." On the matter of the government's promotional activities in the field of transportation, the former commissioner assumed that the promotional activities which the committee had in mind would be directed toward an economic division of labor among the various transportation agencies. In that sense, the various activities of the transport agencies should be promoted, and this could best be done by the agency upon which rests the power and authority to regulate, Mr. Meyer added.

"However," he continued, "I see no reason for federal activity to promote any particular agency unless Congress has expressly legislated to that effect. Competition and individual initiative should furnish a driving force sufficient to produce the best results. I can think of no federal agency which needs to be given such powers."

On the matter of differential rates as between different types of carriers, Mr. Meyer would do nothing in the way of promulgating general rules or devising formulae. There are, he said, questions of fact in each particular situation; and he does not believe "that any general differential rate scheme, no matter how limited, could be prescribed except after full hearing of all interested parties." As the former commissioner summed up his views, this matter "is entirely a question of making a record. No record, no differential."

**Opposes Forced Mergers**—Mr. Meyer's general suggestion as to what should be done to coordinate further the various transportation agencies was that "each agency and each type should be left free to develop its transportation machine in any manner it deems best, subject to approval of the regulating authority." He added that "nothing like a general consolidation plan should be required nor should the regulating authority have the power to force any agency into affiliations with others against their will." At the same time, Mr. Meyer believes that consolidations tend to improve the credit position of the carriers involved, and should bring about improved service and lower maintenance and capital costs. Experience in connection with consolidations as a possible solution of the weak-carrier problem has not been encouraging, he said.

With respect to federal aid, Mr. Meyer noted that it was impossible retroactively to establish equality with reference to past aids. He added, however, that "it is imperative that in contemporary operations equality should be established and maintained." On the matter of government support for a carrier with marginal or sub-marginal income, the former commissioner expressed the general view that any common carrier which is incapable of earning its living should be permitted to go out of business. Substituting one agency for

another "is no calamity, except to the extent that the new agency is incapable of performing any service," Mr. Meyer added. He went on in the latter connection to say that any abandonment should be preceded by cooperative efforts with the view of meeting every reasonable transportation need with the substituted service."

#### January Ton-Miles

The volume of freight traffic handled by Class I roads in January decreased 14 per cent under the corresponding month of last year, according to the Association of American Railroads. Traffic in January amounted to approximately 49 billion ton-miles, according to preliminary estimates based on reports to the association.

The following table summarizes revised statistics for the year 1945, and preliminary figures for January, 1946:

	1945	1944	Per cent decrease
11 months actual	634,370,827,000	679,649,843,000	6.7
December	46,500,000,000	57,264,554,000	18.8
Year	680,900,000,000	736,900,000,000	7.6
	1946	1945	
January	49,000,000,000	56,845,141,000	14.0

<sup>a</sup> Revised estimate.

<sup>b</sup> Preliminary estimate.

#### Railroad Magnaflux Conference

On February 11 and 12 the Magnaflux Corporation sponsored a conference at the Congress Hotel, Chicago, attended by about 150 representative railroad men, many of whom spent Wednesday, February 13, at the Magnaflux laboratories, inspecting new equipment and processes used in this non-destructive method of testing railway track and rolling stock parts.

A feature of the conference was the extensive interchange of views at the various meetings, the following subjects being discussed by railroad men: Magnaflux Inspection of Track, Tools and Parts During Reclamation, by Ray McBrien, engineer of standards and research, D. & R. G. W.; Inspection of Railroad Car Parts, by C. B. Bryant, assistant to vice-president, Southern; Inspection of Locomotive Parts, by A. H. Ralley, welding supervisor, Canadian Pacific; Inspection of Diesel Locomotive Parts, by M. C. Haber, mechanical engineer, Union Pacific.

#### Co-ordinated Mechanical Meetings Next Fall

At a committee meeting of the Co-ordinated Mechanical Associations in Chicago on January 22, preliminary general arrangements were made for the resumption of annual meetings of the four associations making up the co-ordinated group at the Hotel Sherman, Chicago, September 4 to 6, inclusive. These associations include the Railway Fuel & Traveling Engineers' Association, Car Department Officers' Association, Locomotive Maintenance Officers' Association and Master Boiler Makers' Association.

The joint opening session of these four associations on the morning of September 4 will be addressed by a prominent railroad president after which the individual groups will adjourn and reconvene in their respective meeting rooms to consider pro-

grams covering in the aggregate nearly every important current problem in locomotive and car operation and maintenance. The four programs have been carefully coordinated to avoid duplication of subjects and schedule these subjects so as to enable railway officers especially interested in a particular one to hear it and participate in the discussion regardless of which association is presenting it.

An extensive exhibition of railway equipment specialties, materials and shop tools is planned and will be held under the auspices of the Allied Railway Supply Association.

### Large Meeting of P. R. R. Veterans

More than 1,600 veteran employees of the Pennsylvania in and about Philadelphia, whose service with the railroad is estimated to average at least 40 years per man and to total 64,000 years in the aggregate, met February 19 in Convention Hall, Philadelphia, for dinner and stage entertainment, to the latter of which more than 5,000 relatives and friends were invited.

The event, for years the largest get-together of railroad men and their families in the United States, was the annual "indoor picnic" of the General Office Veteran Employees' Association of the P. R. R. System, membership in which is open to employees with more than 21 years of service. The meeting marked both the 25th anniversary of the association and restoration of the annual affair, suspended since 1942 because of the war.

### Rock Island Completes Third Relocation Project

A third step in the \$12,000,000 relocation program of the Chicago, Rock Island & Pacific was completed this week when trains of that road began operating over a new roadbed and track between Centerville, Iowa, and Paris. This line relocation is the third such project to be completed on the railroad's Golden State route, and work has already begun on two more,

one between Floris, Iowa, and Paris, a distance of 16½ miles, and the other between Ainsworth, Iowa, and Brighton, a little over 17 miles. When all projects are completed, there will be approximately 90 miles of new roadbed and track between Kansas City, Mo., and Davenport, Iowa, with curves reduced to 1 deg. or less, and ruling grades will not be over 0.5 per cent.

The Centerville-Paris relocation, begun in June, 1945, resulted in reducing the mileage from 21.98 miles to slightly over 18. The old trackage had many 2-deg. and 3-deg. curves totaling 813 deg. in the distance, while the new line has a maximum curvature of 1 deg. and a total of only 82 deg. There were three miles of 1 per cent grade westward out of the Chariton river bottom and four miles eastward into Udell, Iowa, both of which have been reduced to 0.5 per cent operating grades. The new line is single track but has three 125-car passing tracks. Provision has been made also to install centralized traffic control.

### P. R. R. Scholarships

Two scholarships established in memory of former officers of the Pennsylvania, for the benefit of sons of living or deceased employees of the railroad, will be filled by competitive examination this year, it has been announced by C. E. Musser, the railroad's chief of personnel.

The Frank Thomson Scholarship, established by the heirs of Frank Thomson, a former president of the railroad, entitles the winner to a four-year technical education at any university, college or technical school of his choice, subject to approval by the railroad, beginning with the 1946-47 year.

The William Henry Brown Memorial Scholarship, established in memory of a former chief engineer of the railroad, is available for any course offered to undergraduates at Princeton University for a term of four academic years.

The scholarships will be awarded on the basis of the April College Entrance Exami-

nation Board scholastic aptitude and achievement tests. For further information regarding the requirements applicants should address the Secretary of the University Committee on Scholarships, Princeton, N. J., before March 15.

### Equipment on Order

Class I railroads on February 1, had 38,090 new freight cars on order, according to the Association of American Railroads. On the same date last year, they had 36,734 on order.

This year's February total included 13,179 hopper (including 3,166 covered hoppers), 5,120 gondolas, 718 flat, 13,132 plain box, 4,221 automobile, 1,620 refrigerator, and 100 miscellaneous freight cars.

The Class I roads also had 454 locomotives on order February 1, compared with 451 on the same day in 1945. The former total included 81 steam, six electric and 367 Diesel-electric locomotives compared with 80 steam, two electric and 369 Diesel-electric one year earlier.

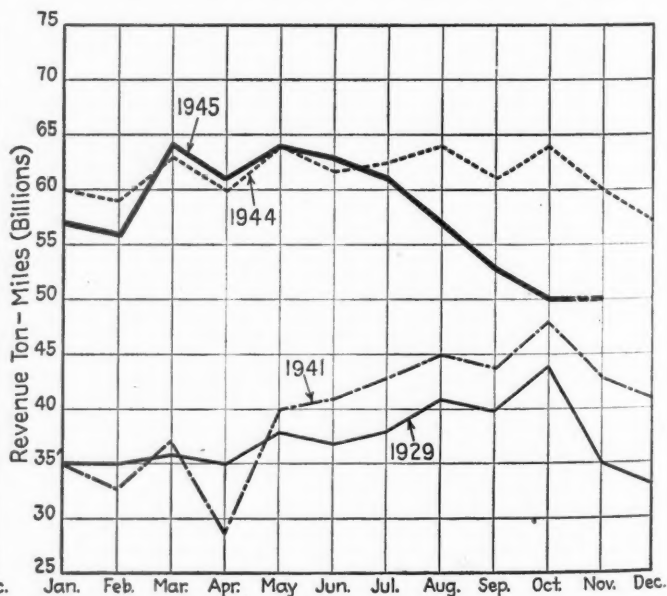
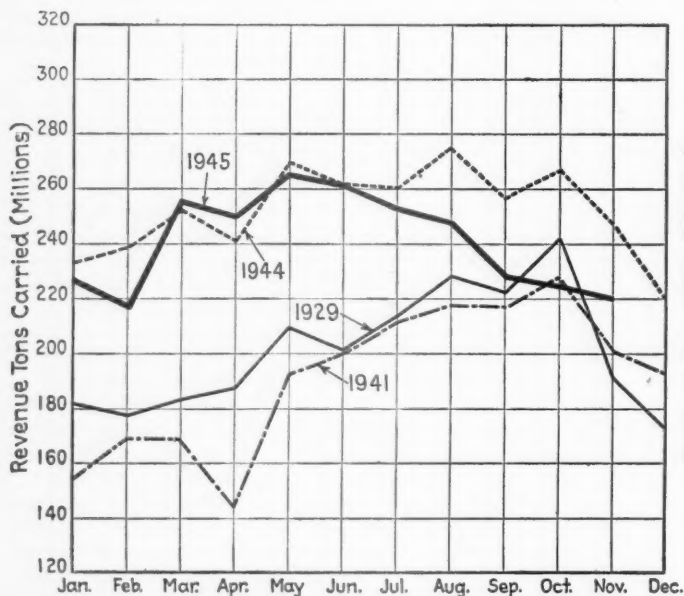
Class I roads put 2,457 freight cars in service in January compared with 4,468 in the same month last year. Those installed last month included 968 hopper (including 35 covered hopper), 521 gondolas, two refrigerator, 282 automobile box and 684 plain box freight cars.

They also put 21 new locomotives in service in January, of which 11 were steam, and 10 were Diesel-electrics. New locomotives installed in January, 1945, totaled 34, of which there were three steam, and 31 were Diesel-electric.

### Freight Car Loadings

Loadings of revenue freight for the week ended February 16 totaled 707,054 cars, the Association of American Railroads announced on February 21. This was a decrease of 6,186 cars or 0.9 per cent below the preceding week, a decrease of 77,649 cars or 9.9 per cent below the corresponding week last year, and a decrease of 67,183 cars or 8.7 per cent below the comparable 1944 week.

Loadings of revenue freight for the week



Revenue Tons and Revenue Ton-Miles—1945 Compared with 1929, 1941 and 1944



ending February 9 totaled 713,240 cars, and the summary for that week, as compiled by the Car Service Division, A. A. R., follows:

#### Revenue Freight Car Loading

For the Week	Ended Saturday, February 9		
Eastern .....	140,384	156,198	153,590
Allegheny .....	127,507	156,448	176,802
Pocahontas .....	56,476	60,238	57,523
Southern .....	130,592	125,134	123,881
Northwestern ..	75,714	82,382	86,637
Central Western ..	121,194	123,276	122,018
Southwestern ..	61,373	72,156	72,730
Total Western Districts ....	258,281	277,814	281,385
Total All Roads	713,240	755,832	793,181
Commodities:			
Grain and grain products .....	50,844	41,340	53,800
Livestock .....	18,331	13,575	14,813
Coal .....	186,166	176,222	185,959
Coke .....	8,244	14,714	14,975
Forest Products	35,588	38,904	44,694
Ore .....	5,878	10,757	13,959
Mdse. l.c.l. ....	120,252	96,774	99,370
Miscellaneous ..	287,937	363,546	365,611
February 9 ....	713,240	755,832	793,181
February 2 ....	723,135	739,556	805,714
January 26 ....	709,130	759,625	810,890
January 19 ....	749,475	777,572	798,630
January 12 ....	772,558	783,060	779,531
Cumulative total, 6 weeks .....	4,319,995	4,499,043	4,757,595

In Canada.—Carloadings for the week ended February 9 totaled 64,569 as compared with 64,593 for the previous week and 65,621 cars for the corresponding week last year, according to the compilation of the Dominion Bureau of Statistics.

	Total Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
February 9, 1946..	64,569	34,852
February 10, 1945.	65,621	37,159
Cumulative Totals for Canada:		
February 9, 1946..	383,679	199,779
February 10, 1945.	378,330	201,064

#### Western Roads Join Class Rate Fight

A group of 32 western railroads have joined the northeastern states in seeking a permanent injunction against the Interstate Commerce Commission's interim freight rate order, hearings on which were held at New York February 18-21 before a 3-judge federal court. The western roads maintained that the blanket 10 per cent decrease in class rates ordered by the commission in that territory was unjustified, because of the admittedly higher costs of operation in the West. They also argued that the commission's report and order of May 15, 1945, was unsupported by the evidence, offering in support of this contention much of the material that was contained in the original brief filed by the northeastern states (reported in *Railway Age* last December 8). Douglas Smith, counsel for the group; Glen V. Vivian, manager of the statistical bureau of the Western Trunk Line Association; and Lawrence R. Capron, vice-president of the Chicago, Burlington & Quincy, appeared on behalf of the western railroads.

Parker McCollister, special New York assistant attorney general representing the northeastern states, asserted that there was no evidence to support the commission's finding that present class rates are discriminatory, but ample indication that rates as modified by the interim order (requiring a 10 per cent increase of class rates in Offi-

cial territory and a like decrease in the South and West) would be.

Edward H. Miller, defending the Interstate Commerce Commission's action, attempted to define the scope of judicial review of the order; and then to show that the commission had satisfied all the conditions which it was within the jurisdiction of the court to consider. He emphasized the importance of the order, and argued that the commission had taken what it believed to be the most just action possible in a case where complete justice could never be attained.

#### Sees No Early Relief in Box-Car Squeeze

(Continued from page 409)

relief of which eastern and southern roads are still delivering approximately 1,200 empty box cars daily to their western connections, the C.S.D. chairman pointed out that other demands for box cars have not decreased as compared with the period immediately prior to V-J Day.

With respect to stock cars, the "heavy" demand has resulted in some delays in filling orders currently; and "all roads have been instructed to assist livestock loading roads with surplus cars and expedite their return movement." Mr. Kendall's detailed discussion of the refrigerator car situation tells of the reported shortages, but at the same time emphasizes the fact that the four weeks ended February 2 brought the highest four-week total of "reefer" loadings on record.

Coal Cars in Demand—The outlook for coal production for domestic use and export prompted Mr. Kendall to assert that "only the closest possible cooperation of shippers and receivers in prompt unloading and release, coupled with expeditious movement by the carriers, will prevent serious coal car deficiencies developing." The steel strike, he said, had little effect on coal production, but it did cause a heavy reduction in the demands for gondolas, thus resulting in the building of a "comfortable surplus" of such cars on most roads. All requirements for flat cars are being "fully protected," with some roads reporting surpluses of the shorter flats. Requirements for covered hoppers are "unusually heavy for this season of the year and all serviceable cars are in active service," approximately 225 being temporarily in grain service.

Freight house conditions throughout the country have "substantially improved," Mr. Kendall said in reporting on the l.c.l. situation. He added, however, that interruption and delays occasionally occur due to interference by weather conditions and local labor difficulties. On the matter of embargoes, the C.S.D. chairman suggested that shippers desiring to forward export traffic should consult railroad agents for information as to current embargoes. He pointed out that frequent changes have been made in export embargoes.

Export freight handled at Atlantic and Gulf ports during January was approximately 20 per cent less than during the peak of the war, the C.S.D. chairman reported. He added that the volume is made up principally of relief shipments and "increased commercial forwardings to

practically the whole range of foreign destinations." There has been no congestion at any port, the strike of New York tug boat employees having been anticipated and movements to that port "drastically curtailed." The shortage of motive power on the National of Mexico has slowed the return of cars to this country, thus making it necessary to continue restrictions on the issuance of permits for international shipments via that road.

Detention Mounts—January car detention reports indicated that the percentage of cars detained by shippers beyond the 48 hours free time was 19.82, the "highest percentage of detention within the past two years." It compares with December's 19.07 per cent and January, 1945's 17.3 per cent. "There has," said Mr. Kendall, "been an upward trend in the detention of freight cars by receivers, progressively and substantially increasing each month for the past five months beginning with the end of hostilities in the Pacific. This is a matter of serious concern to both railroads and shippers. In view of the present tremendous demand for cars utmost efforts are necessary to secure prompt loading, transportation and unloading of cars."

The report's figures on the supply of freight equipment showed that there was a decrease of 8,612 in the number of serviceable freight cars—January 1 compared with December 1. The bad-order percentage on January 1 was 4.3 compared with 2.5 per cent on January 1, 1944.

#### Program of American University Transportation Institute

Further details of the "rail transportation institute," an intensive four weeks' course in the principles and problems of rail transportation scheduled to begin March 4 at American University, Washington, D. C., have been announced by that institution, supplementing the general outline which appeared in *Railway Age* of February 2, page 293. It was said that registrations have been received from railroad employees all over the country, about half of them being veterans. Additional registrations will be received up to February 28.

The course is scheduled for morning and afternoon sessions of three hours each five days weekly, with a morning session only on Saturdays. Included in the courses and special lectures announced are the following: Basic principles in transportation, Dr. L. M. Homberger, director of the institute; legal aspects of manpower problems and Interstate Commerce Commission organization and procedures, Clarence A. Miller, vice-president and general counsel, American Short Line Railroad Association; public relations, C. J. Corliss, manager, public section, Association of American Railroads; selling transportation, Carl B. Walker, assistant to vice-president, Southern Railway; statistics, Graham E. Getty, statistician, Bureau of Railway Economics, A. A. R.; cost finding, Fred L. Sears, manager Bureau of Statistics, Boston & Maine; carrier and radio communication, P. B. Tanner, Bendix Radio Division; maintenance of equipment problems and new steam and Diesel locomotives, B. C. Gunnell, engineer, Southern;

and maintenance of way problems, J. B. Akers, chief engineer, Southern.

Other types of transportation will be discussed as follows: Truck, John V. Lawrence, managing director, American Trucking Associations; Bus, A. W. Kohler, manager, National Association of Motor Bus Operators; Air, John D. Crane, president, Transportation Analysts, Inc.; and Water and Pipelines, H. K. Snell, assistant vice-president, A. A. R.

In addition, four supper meetings of the institute are scheduled, the first, set for March 3, being a welcoming meeting to which members of Congress and other government officials are invited, and the others occasions for addresses by invited speakers, including Col. J. Monroe Johnson, director of the Office of Defense Transportation; Col. A. B. Barber, manager, transportation department, U. S. Chamber of Commerce; E. F. Lacey, executive secretary, National Industrial Traffic League; Representative Carroll Reece of Tennessee, member of the House interstate and foreign commerce committee, and others.

### Injunction Against Chicago Junction Asked

A petition to enjoin the Chicago River & Indiana, the Chicago Junction and the New York Central from continuing in effect certain "unlawful" operating practices with respect to live-stock originating on the lines of the Chicago Junction and moving from Chicago via the lines of eight Eastern carriers has been filed in the United States District Court at Chicago. The dispute is the result of a settlement, effected February 1, of various demands of the Brotherhood of Railroad Trainmen on the Chicago Junction and associated lines, which, in effect, changed certain long-standing operating practices in connection with the movement of live-stock from the Chicago Stock Yards. The petition was filed by the Baltimore & Ohio, Chesapeake & Ohio, Erie, Grand Trunk Western, New York, Chicago & St. Louis, Pennsylvania, Pere Marquette and Wabash railroads.

**Would Bar "Foreign" Crews**—The settlement, of which the eight petitioners are complaining, arose from a submission filed by the B. of R. T., B. of L. F. & E., and B. of L. E., with the First division of the National Railroad Adjustment Board in 1938, demanding that the work of placing for loading empty stock cars which were in the accounts of various road-haul carriers and of switching out loaded stock cars and assembling them for movement to the lines of the road-haul carriers was work belonging to the crews of the Chicago Junction rather than to the crews of the outbound lines. While asking the changes described above, the brotherhoods also requested that the practice of permitting "foreign" crews of inbound live-stock trains to set out dead freight and merchandise at numerous points on the rails of the Chicago Junction be discontinued and that such set-outs be limited to designated yards, the cars to be handled from there by Chicago Junction crews.

At that time the New York Central and its affiliates, the Chicago River & Indiana and the Chicago Junction, filed an answer with the National Railroad Adjustment Board, pointing out, among other things,

that the practice complained of had been in effect since the construction of the Chicago Junction and that crews of that line had never performed any of the work in question. It further pointed out that prior to, and since, May 16, 1922, "foreign" roads had been permitted to come onto the line of the Chicago Junction and perform that work and that the order of the Interstate Commerce Commission of that date, authorizing the New York Central to acquire control of the Chicago Junction and the Chicago River & Indiana, specifically stated, in condition three, that "traffic and operating relationships (then) existing between the Junction and the River road and all carriers operating in Chicago shall be continued, insofar as such matters are within the control of the Central."

**Accedes to Union Demands**—Following presentation to the Adjustment Board of the carrier's submission, the complaining unions withdrew their 1938 case and it lay dormant until late in 1945, after the First Division of the Adjustment Board had ceased to function due to conditions caused by the decision of the United States Supreme Court in the Elgin, Joliet & Eastern case. In 1945, however, the case was again presented to the carriers' management by the B. of R. T. alone, each side holding to the position it had taken in the 1938 case. Failure to reach an agreement in the 1945-1946 negotiations led to a strike vote and the appointment of a presidential emergency board, which, however, the organization decided to ignore. Faced with the certainty of a strike of its switchmen in the Chicago terminals, and the possibility of such a strike spreading to other carriers in the area, the New York Central acceded to the demands of the trainmen.

Under the new operating practices, inbound carriers may continue to operate as before, placing their own cars of live-stock directly at the pens for unloading except that such stock trains, when they handle other freight, may make set-outs of such dead freight at only two designated points on the rails of the Chicago Junction and Chicago River & Indiana. Outbound carriers of live-stock which heretofore have been switching out their own cars of stock and assembling their own trains at the stock yards must discontinue this practice and loads are to be pulled by Chicago Junction crews and delivered to the outbound carriers on designated tracks near the stock yards. The right to pull empties from the pens remains with the road-haul carriers, but the right to spot empties for loading is given to crews of the Chicago Junction, under the terms of the settlement.

In their petition the eight complaining roads allege that by its settlement with the B. of R. T., the New York Central and its affiliates have violated condition three of the 1922 order of the Commission (Finance Docket No. 1165) and have damaged them to the amount of \$10.96 per car of loaded livestock handled outbound via their respective lines by reason of being required to pay the Chicago Junction a charge of \$12.96 per car in lieu of the wheelage charge of \$1 per car in each direction, which prevailed prior to February 1, and which in the aggregate amounts to a total damage of \$675 per day. The complainants also state they are suffering additional dam-

age by reason of loss of good-will because they are unable to continue to give the same high quality of service performed when the entire operation was under their own control.

### Coulter Urges Railroads Start Winning Friendships

Instead of complaining, railroads should begin a campaign of winning friends and influencing people through a system of better public relations. That was the gist of an address delivered before the Omaha Traffic Club on February 14 by J. R. Coulter, chief traffic officer of the St. Louis-San Francisco, who appeared at the meeting as guest of honor and principal speaker.

The speaker said that for years the railroads have claimed that their competitors are under-regulated, under-taxed and over-subsidized. If such a condition exists and it is to be righted by a revised national transportation policy, the railroads "will need a lot of friends, not only in the halls of Congress but on every street in every town in the United States." Mr. Coulter declared that the railroad industry had emerged from the war with good public relations, but added that the "public memory is short and something must be done to retain this favorable impression."

"It can be accomplished only through continued good public relations—a round-the-clock job," he explained. Amplifying this statement, the speaker pointed out that a little more transportation statesmanship on the part of the carriers would make unnecessary an extension of any mode of transportation into an uneconomical field. He said:

"For example, it is ridiculous to think of carrying freight in a truck from Omaha to California when it is so much more economical by rail. Also the traveling public should be made to realize that it is unnecessary to take a plane from Omaha to Chicago or Kansas City because the trip can be made far more comfortably by rail. The same, of course, goes for long trips by bus and comparatively short trips by rail which might possibly be made better by bus or private automobile."

Volume at proper rates is the crux of railroad earning power, Mr. Coulter continued. The railroads have always dealt in mass transportation, with approximately 98 per cent of their tonnage in carload lots, and they are now out to get not only all possible carload tonnage, but also to recapture l. c. l. traffic and coach passenger business.

### Club Meeting

The Railroad Enthusiasts, Inc., New York division, will meet at 7:45 p. m., February 27, in room 5928, Grand Central Terminal. C. K. Scott, engineer maintenance-of-way of the Erie, will discuss "The Railroad's Roadbed." An exhibit of rail sections, old and new, plus a New York Central film showing modern, mechanized equipment and methods, will be included in the program.

A list of current publications of interest to the transportation industry will be found on page 435.



# With the Government Agencies

## Bill Would Suspend RR Reorganizations

Senate committee would let  
agreed debt adjustments  
end bankruptcies

Further hearings were begun February 19 by the Senate committee on interstate commerce on the bill (S. 1253) introduced last summer by Senator Wheeler, Democrat of Montana, chairman of the committee, at the request of the Interstate Commerce Commission, to implement voluntary modification of railroad financial structures.

**Favored by I. C. C.**—This bill would in some respects amplify the provisions of the so-called McLaughlin act of 1942, which expired November 1, 1945, under which arrangements for the postponement of maturities or interest payments or modification of railroad security terms and capital structures could be effected by prescribed procedures without subjecting the company to reorganization involving bankruptcy proceedings. The commission, as noted in *Railway Age* of July 21, 1945, page 117, advocated legislation of this character as a means of avoiding the lengthy and costly bankruptcy routine through steps short of reorganization, taken with the consent of at least a majority of the bondholders concerned and under the commission's supervision.

Following hearings last fall, the committee has revised certain parts of the bill as originally introduced, the most important change being to make its provisions applicable to many railroads now in process of reorganization. This would be accomplished by suspending the progress of court or commission proceedings with respect to such reorganizations upon passage of the bill, the affected roads being required instead to undertake the debt adjustment or modification measures provided in the bill for roads not undergoing reorganization but needing relief of this character.

The bill provides that such suspended reorganization proceedings shall be dismissed upon consummation of satisfactory adjustments of this nature, or upon payment of the company's matured and unpaid obligations. The authority and compensation of trustees in reorganizations, and their counsel, would terminate 30 days after enactment of the statute.

**Substitute for Hobbs Bill**—In commenting upon these modifications of the original bill, Senator Wheeler remarked that he and some other members of the committee considered its provisions more desirable than those of the so-called Hobbs bill (H.R. 37), which never has been reported to the Senate since its passage by

## R. R. Shop Apprentices Systems Under "GI" Bill

Extension to the apprentice systems established in railroad shops under joint labor-management auspices of the provisions for practical training and education of veterans included in the so-called "G. I. bill of rights" has been authorized under an interpretation of the requirements of the statute approved by General Omar N. Bradley, administrator of veterans affairs, according to Veterans' Administration sources.

Some delay in approving such application on a nationwide basis reportedly resulted from uncertainty as to whether it was necessary to secure approval from the various states individually for extension of the provisions for training to such joint apprentice systems.

the House February 14, 1945, without any expression of opposition. The committee has been under "terrific pressure" to report the Hobbs bill, he said, and action on it could probably be completed more quickly than on S. 1253, but he did not know whether equity holders and parties concerned in long-pending railroad reorganizations would prefer to see the Hobbs bill become law, as he thought it would if favorably reported to the Senate.

Testimony at hearings last fall on S. 1253 indicated that further court proceedings, in some instances rather lengthy, might be required under the Hobbs bill, which would restrict the commission's authority to reduce the capitalization of companies in reorganization and amplify the courts' responsibilities in such proceedings. The views of the committee with respect to the handling of reorganizations under present laws were indicated at some length in a report recommending an investigation of the performance of trustees and receivers, as summarized in *Railway Age* of February 16, page 376.

The first witnesses heard by the committee on the amended version of S. 1253 were Walter E. Meyer, appearing for himself and other minority stockholders of the St. Louis Southwestern, and Elisha M. Friedman, consulting economist. Mr. Meyer outlined to the committee the status of the prolonged litigation in which he has been engaged in an effort to have the Southern Pacific, as controlling stockholder of the Cotton Belt, either subordinated to other creditors or eliminated, on the ground of alleged misfeasance on its part in view of what he called its fiduciary relationship to the controlled road.

In its present form, Mr. Meyer said, (Continued on page 419)

## Finds Rails' 1945 Under Pre-war 1941

I. C. C. bureau studies effect  
of war on "waste" costs  
and traffic make-up

The rate of return for all Class I railroads for 1945, whether stated as the ratio of net railway operating income to the net property investment or to valuation, was lower than in either 1944 or 1943, the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission points out in the latest issue of its "Monthly Comment." This was true not only on the basis of the net railway operating income actually reported (which took into account accelerated amortization of emergency facilities and consequent tax adjustments) but also remained true after the 1945 net railway operating income was restated to eliminate the effect of these extraordinary adjustments.

**Tax Credits**—Charges to operating expenses during the last four months of 1945 for amortization of defense projects in excess of normal accruals amounted to about \$594 million, it was indicated, and these charges resulted in concurrent credits to railway tax accruals of approximately \$434 million. "This large tax credit results from the fact that the carriers have taken advantage of the statutory provisions of the tax laws permitting the amortization over shortened periods ending with September, 1945, of property certified as emergency facilities under section 124 of the Internal Revenue Code." If these "unusual" charges and tax credits had not been entered on the books, the net railway operating income of the class I roads for 1945 would have been about \$1,010 million, according to the bureau, instead of the \$850 million reported.

Using the net railway operating income actually reported, the rate of return for all Class I roads for the year was 3.79 per cent on the property investment basis and 4.36 on the valuation basis. On both bases the Pocahontas region ranked highest, the ratios being 4.77 and 5.63 respectively, and the Eastern district lowest, with rates "considerably below" those of the other territories, the figures being 3.28 and 3.64, respectively. When the year's net railway operating income was restated by the bureau to eliminate the effect of the extraordinary charges for amortization and resulting tax credits, the rate of return for all roads on the property investment basis was 4.50, and on the valuation basis 5.18. The relative positions of the Pocahontas roads and the Eastern district roads with respect to the average was not greatly affected by this method of computation.

Using the 1945 ratios obtained with the

"restated" net railway operating income, the figures for last year as compared to 1944 and 1943 are, on the property investment basis, 4.50, 4.91 and 6.03, respectively, and on the valuation basis, 5.18, 6.03 and 6.93, respectively.

**Net Income Below '41**—Net income after all charges was estimated by the bureau at \$450 million for 1945. Adjustment of this total to eliminate the extraordinary charges and tax credits resulting from accelerated amortization would increase this to \$610 million, it was estimated. Using the net as reported, the 1945 total was 32.5 per cent below the previous year's total, 48.5 per cent under 1943, and 10.0 per cent below 1941, "substantially a pre-war year." Taking the calculated net, with the amortization adjustments omitted, the 1945 total was still 8.6 per cent under the previous year's and 30.1 per cent below 1943, though it was 22.0 per cent above the "pre-war" 1941 total.

Another section of the "Comment" referred to the "pronounced influence" of passenger revenue during the war years on the total operating revenue of the Class I roads. The passenger revenue of \$515 million for the "predominantly pre-war" year 1941 was 9.6 per cent of all operating revenue, as compared with \$1,716 million or 19.3 per cent of the total in 1945. Passenger revenue for 1944, the peak year, was 248 per cent above that of 1941. The 1945 total was 4.1 per cent under the record figure of 1944, but still was 3.8 per cent above the 1943 total.

**Big Increase in Factory Products**—The effect of the war on the distribution of freight traffic by commodity groups was examined by the bureau in a comparison of 1939 totals with those for 1944, the data for 1945 not being available. The comparison was made both with freight revenue figures and total tons originated, the latter being significant in that they do not reflect changes in the length of haul. The total 1944 freight revenue was 117.2 per cent above the 1939 total, the increases for the separate commodity groups being as follows: Products of agriculture, 76.6 per cent; animals and products, 76.1 per cent; products of mines, 73.3 per cent; products of forests, 71.3 per cent; manufactures and miscellaneous 191.7 per cent; and all l.c.l., 48.3 per cent. The effect of war operations on the manufactures category, and the long hauls involved, was further indicated in the change in the relative revenue positions of the various groups, with manufactures accounting for 38.2 per cent of freight revenues in 1939 and 51.3 per cent in 1944.

On the basis of tons originated, 1944 traffic was 65.4 per cent greater than in 1939. The increases for the separate commodity groups were: Products of agriculture, 59.1 per cent; animals and products, 69.3 per cent; products of mines, 58.0 per cent; products of forests, 66.7 per cent; manufactures and miscellaneous, 85.0 per cent; and all l.c.l., 34.9 per cent. Revenue per ton of freight originated for all freight increased 31.6 per cent in 1944 over 1939, while the average haul per ton of freight in the same interval increased 34.8 per cent.

The war peak of overtime payments to employees of Class I roads was reached in January, 1945, presumably as a result of

severe weather conditions, the bureau showed, and they continued "heavy" through the year, though they tended to drop in the latter months, both as compared to the previous year and to the earlier months of 1945. Whereas overtime payments amounted to 15.55 per cent of total compensation in February, 1945, the percentage declined subsequently to 10.95 for October, although it rose again in November to 11.89 per cent.

**Casualty Costs Rise**—Charges to operating expense for loss and damage and personal injuries—so-called "transportation waste"—increased "greatly" during the war, the bureau's data disclosed. From 1939 to 1944 the total loss and damage expense increased over 200 per cent, the increase for freight loss and damage being 208 per cent, while freight ton-miles increased 121 per cent. Damage to livestock on right of way increased 97 per cent; to "property of others," 140 per cent; and to baggage, 738 per cent. The cost of clearing wrecks increased 249 per cent and expense covering injuries to persons increased 161 per cent. Total loss and damage per 1,000 car-miles increased from \$0.96 in 1939 to \$1.73 in 1944.

The "Comment" referred also to data included in the report of the Office of Defense Transportation's federal manager of motor carrier operations (noted in *Railway Age* last week) derived from waybill and cost studies of selected Midwest truckers. An analysis of these figures indicated an operating ratio of 101 per cent on all interstate class rate motor traffic as compared to 82 per cent on single line class rate traffic, or 88 per cent on the combined operations. The operating ratio on all interstate class rate traffic was 85 per cent, as compared to 97 per cent on intrastate class rate traffic. The over-all operating ratio on class rate traffic for all truckers covered by the study was 88 per cent, but it was 115 per cent on minimum charge shipments, 106 per cent on commodity rate traffic, and 100 per cent on exception rate traffic.

In its regular survey of operating results, the bureau noted that last December's freight revenues were 13.5 per cent below November and 27.8 per cent below December, 1944. The freight revenue index (based on the 1935-1939 monthly average as 100) for December was 154.4, the lowest index since January, 1942. The passenger index, similarly calculated, was 460.1 for last December, as compared to 418.0 for the same month the previous year and 432.7 for December, 1943. Passenger revenue was 7.1 per cent more, on a daily basis, in December, 1945, than in November, and 10.1 per cent more than in December, 1944.

**Loadings Outlook**—Turning to the outlook for the near future, the bureau noted that the Production and Marketing Administration of the Department of Agriculture expects loadings of grain and products this month (February) to average 54,900 cars weekly, or 31.8 per cent over the same month in 1945 and 5.9 per cent over average loadings in January, 1946. Loadings in March and April are expected to average 53,500 and 51,600 cars weekly, respectively, making March loadings 22.4 per cent and April 3.1 per cent above the same 1945 months. Due to bad weather

and the resulting backlog of grain awaiting transportation up to the middle of March last year, it was observed, grain loadings broke all records for about six weeks after that time.

The same source estimates livestock loadings in March and April at about 10 per cent above the corresponding 1945 figures. Whereas the "highest four weeks loading on record" of refrigerator cars was 140,416 cars, the estimated demand for such cars is 174,300 for February, 189,000 for March, and 171,900 for April. Loadings of coal have been unusually high in the past two weeks, in relation to production, in large part due to diversion of the output of so-called captive mines from steel mills to other consumers, yet general demand continues heavy, it was stated, and coal cars are in tight supply. "While good box cars seem to be better distributed than during the winter months of 1945, the available supply is cut by detention due to labor troubles and a shorter work week. If one type of lading is accorded sufficient cars, it is at the expense of another type of lading."

### Senate Passes Independent Offices Bill

The Senate on February 18 passed its version of the House-approved Independent Offices bill, carrying appropriations totalling \$9,676,000 for the Interstate Commerce Commission during the fiscal year ending June 30, 1947. The bill, which also carries \$267,838,792 for the Public Roads Administration, including \$25,000,000 for grade crossing elimination and protection work, is now in conference where the differing Senate and House versions will be reconciled.

### Wartime Restrictions Off River and Harbor Work

President Truman has signed Senate Joint Resolution 105 which strikes from the latest rivers and harbors authorization bill (the act of March 2, 1945) the language stipulating that none of the authorized projects should be appropriated for or constructed until six months after the termination of the war unless such project was recommended by a defense agency or the President as necessary in the interest of national defense or security. Congressional action on the resolution was completed when the House adopted it on February 8.

### Passenger Traffic Men Get Army Certificates

During ceremonies at a dinner at Washington, D. C., February 20, Col. J. R. Messersmith, deputy chief, Commercial Traffic Service, Office of the Chief of Transportation, presented to 10 passenger traffic specialists who were responsible for routing more than 39 million troops over American railroads during the war the War Department's Certificates of Appreciation. The ceremony was attended by Maj. Gen. Edmond H. Leavey, chief of transportation, and other Transportation Corps officers, and H. W. Siddall, chairman of the Interterritorial Military Committee, presided.

Among those receiving the awards were:



E. P. Burke, passenger traffic manager of the Pullman Company, Chicago; A. B. Chown, chairman of the Trunk Line-Central Passenger Association, New York; W. H. Clifford, secretary of the New England Passenger Association, Boston, Mass.; M. B. Duggan, chairman of the Southern Passenger Association, Atlanta, Ga.; and J. M. Vonau, Jr., chairman of the Southwestern Passenger Association, St. Louis, Mo.

In addition, awards were given five men who were attached for the war period directly to the Office of the Chief of Transportation: J. J. Kelley, manager of the Military Transportation Section, Association of American Railroads; J. W. Porter, joint agent of the Trunk Line-Central Passenger Association; F. H. Jones, military routing representative of the Southern Passenger Association; G. C. Roney, passenger traffic representative of the Western Military Bureau; and D. R. Culver, special representative of the Pullman Company.

### **Bush Terminal L.c.l. Service Again Before I. C. C.**

The Bush Terminal Railroad has renewed its petition asking the Interstate Commerce Commission to investigate the lawfulness of the services, practices and charges in effect in connection with the receipt and delivery of l.c.l. freight by it at buildings 1 to 10 of the Bush Terminal Buildings Company at Brooklyn, N. Y.

A similar petition was filed last year, but the commission dismissed it without prejudice to its renewal. At that time litigation was in progress as to the road's obligation to perform this service by rail, and an injunction requiring such service was in effect. This injunction expired January 31, the petition noted, upon effect of a court order requiring it to furnish such rail l.c.l. service to buildings 1 to 10 up to April 1, 1960, a situation the road considers inequitable and in need of relief by appropriate action of the commission.

### **January Employment**

Railroad employment decreased 0.35 per cent—from 1,397,936 to 1,392,535—during the one-month period from mid-December, 1945, to mid-January, 1946, and the January total was 0.07 per cent below the total for January, 1945, according to the preliminary summary prepared by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission. The index number, based on the 1935-1939 average, was 141.9 for January, 1946, as compared with 139.2 for the previous month and 142.0 for January, 1945.

January employment was above that of the corresponding month in 1945 in three groups, the increases ranging from 0.64 per cent in maintenance of equipment and stores to 4.6 per cent in transportation, other than train, engine and yard. The decline in the other four groups ranged from 0.25 per cent in professional, clerical and general to 2.61 per cent in the yardmasters, switch-tenders and hostlers category.

As compared with the previous month, there were declines in January in three employment groups, the range being from 0.42 per cent for yardmasters, switch-ten-

ders and hostlers to 2.78 per cent for maintenance of way and structures. Increases in the other groups ranged from 0.12 per cent in train and engine service to 1.33 per cent in maintenance of equipment and stores.

### **New Pacific Coastwise Service Sponsored by W. S. A.**

The War Shipping Administration announced in Washington, D. C., on February 15, that it had allocated nine coastal cargo vessels for the inauguration of Pacific coastwise services which were "expected to start in mid-February." The announcement also said that the new water service was "expected to greatly alleviate the extreme car shortage in the Pacific Northwest and California."

The nine vessels have been allocated three each to Coastwise Line and Pope & Talbot, Inc., and one each to Olympic Steamship Company, Burns Steamship Company, and James Griffiths & Sons. All will operate as agents of W. S. A. under the "temporary" authority which the latter recently obtained from the Interstate Commerce Commission. Weekly service is to be maintained between California ports and the Columbia river, and semi-weekly service between California and Puget Sound.

### **Object to I. C. C. Suspension of Lower Auto Rates in East**

Railroads in Official territory and several automobile manufacturers have asked the Interstate Commerce Commission to reconsider its I. & S. No. 5384 proceedings and vacate the order of Division 2 therein suspending certain tariff schedules intended to establish an exception rating on new automobiles in interstate commerce lower than the maximum prescribed by the commission in its No. 28190 proceedings.

Issuance of the suspension order was reported in *Railway Age* for February 2, page 295. This action of Division 2 ignored the findings of the entire commission as to the lawfulness of rates much lower than those suspended, the railroads asserted, while the petitioning manufacturers, who asked in addition that the investigation be discontinued upon vacation of the suspension, contended that there was no good reason to believe the suspended rates were less than a reasonable minimum, which was the only ground for attacking them.

### **T. P. & W. and Unions Meet; Wheeler Urges Probe**

George P. McNear, Jr., president of the strike-bound Toledo, Peoria & Western, and W. C. Keiser, vice-president of the Brotherhood of Locomotive Firemen & Enginemen, and chairman of the committee of railway labor unions conducting a strike against the road, at the suggestion of Governor Dwight H. Green of Illinois, met with the Illinois Commerce Commission this week to discuss the governor's proposal of a three-man arbitration board to settle the nearly five-month old strike of T. P. & W. employees. Governor Green has suggested that the dispute be submitted to a board consisting of one representative each of the management and the employees, with a neutral arbitrator, agreeable to the par-

ties, to be named by the Illinois Commerce Commission.

Investigation by the Senate interstate commerce committee of the controversy between the Toledo, Peoria & Western management and the railroad labor organizations is proposed in Senate Resolution 229 which has been introduced by that committee's chairman—Senator Wheeler, Democrat of Montana. Among other things the committee would be directed by the resolution to make recommendations as to whether "in view of the long-continued failure to obtain adjustment of the disputes, the public interest in the restoration of transportation and the peaceful settlement of disputes in the railroad industry requires the condemnation of the property of the railroad by the government of the United States and in the event of such condemnation, the extent to which the compensation to be paid should be influenced by the inability of the management over a course of years to operate the property and make it productive."

Other subjects on which recommendations would be called for are: "(1) The reasons for the failure of the employer and employees involved in the said disputes to bring about a peaceful adjustment thereof in a customary manner; (2) the responsibility for the use of firearms and the killing and wounding of employees in the course of said disputes; (3) the action required to obtain a satisfactory adjustment of the disputes and reasonable assurances against their recurrence."

In leading up to these assignments, which would be carried out by the interstate commerce committee or any subcommittee thereof, the resolution "whereas" that the T. P. & W. disputes have persisted since December 28, 1941; that the disputes are with "standard railway labor organizations, which, during the entire period said disputes have persisted, have exhibited outstanding regard for the public interest and pursuant thereto have utilized established governmental instrumentalities for the adjustment, without the interruption of transportation, of their disputes with the managements of other railroads throughout the country"; that the persistence of disputes on the T. P. & W. has resulted in the disruption of transportation on that road "during virtually the whole period that said disputes have persisted, except while the railroad was under government seizure"; that the attempts of the management to operate "have recently resulted in the killing and wounding of a number of employees of the railroad through the use of firearms by agents of the railroad"; and that "the public interest now requires the adjustment of the disputes now existing, the immediate cessation of the use of firearms, and the restoration of transportation on the railroad."

The committee would be directed to begin the investigation "promptly" and report to the Senate "at the earliest practicable date." It would have the power of subpoena.

### **St. Lawrence Hearing Opens**

Senate foreign relations committee hearings on Senate Joint Resolution 104 to provide for approval of the United States-Canadian agreement for development of the St. Lawrence seaway and power proj-

ect got under way on schedule February 18. They are being held before a subcommittee headed by Senator Hatch, Democrat of New Mexico.

The committee has announced that the sessions will continue over 16 hearing days, with the time equally divided between proponents and opponents. Numerous proponents have appeared at this week's sessions, their lead-off man having been Dean Acheson, under secretary of State.

Meanwhile the Association of American Railroads has issued a pamphlet entitled "The St. Lawrence Project—A Way to Spend Borrowed Money for High-Cost, Part-Time and Inferior Transportation, Made to Seem 'Cheap' by Loading Its Hidden Costs Upon the Taxpayers."

### Truckers Again Denied Relief in No. 28300 Rate Cut

The Interstate Commerce Commission has denied a petition of the American Trucking Associations and others for reconsideration of its supplemental report and order in the general class rate proceedings, No. 28300, wherein interim adjustments in rail class rates were prescribed for all sections of the country east of the Rocky Mountains. The supplemental report was outlined in *Railway Age* of November 10, 1945, page 762, while the truckers' petition was noted in the issue of January 12, page 162.

While operation of the commission's order effecting the adjustments has been held up by the Utica, N. Y., court proceedings instituted by nine eastern states, the truckers' petition urged the commission to proceed with reconsideration of the order at least insofar as it required reductions in l. c. l. rates, in view of their "desperate financial straits."

### I. C. C. Again Advises "Adequate Block System" Installation

As a result of a head-on collision of two electric traction cars December 29, 1945, at Coady, Tex., on the electrified Missouri Pacific (New Orleans, Texas & Mexico) line from Houston, Tex., to Goose Creek, the Interstate Commerce Commission, in a report of its investigation under the supervision of Commissioner Patterson, has recommended that an "adequate block system" be installed on that line. The accident was caused, according to the report, by an inferior train occupying the main track on the time of an opposing superior train.

The accident occurred in a dense fog. There were no fatalities, but 29 passengers and 3 employees were injured. Trains were operated by timetable and train orders on the single-track line, there being no block system in use. The average daily movement in the vicinity in the 30 days preceding the collision was 44.9 trains. The maximum authorized speed for the trains that collided was 40 m. p. h.

The trains involved were No. 21 westbound and No. 12 eastbound, the first-named being superior by direction, no train order having been issued to restrict such authority under timetable provisions. Under the rules, the inferior train was required to clear the time of an opposing superior train not less than 5 min., or to

provide flag protection, the schedule time being applied at the switch where the inferior train enters a siding.

The westbound train was scheduled to leave Cady, a station 6.8 miles west of Goose Creek, at 8:36 a. m., which required an opposing inferior train to be in the clear on the siding there by 8:31. When the eastbound train reached the west switch of the siding, 1,377 ft. west of the station, the motorman looked at his watch, reading the time as 8:31, and concluded he had sufficient time to proceed on the main track to the east siding switch and there clear No. 21. Soon afterward he saw No. 21 approaching. Applying the brake, he brought his train to a stop at a point 241 ft. east of the west siding switch, where it was struck by the opposing train. The front end of each car was badly damaged.

The westbound train had stopped at the station at Coady and was proceeding at about 20 m. p. h. when the motorman discovered the approaching opposing train. Because visibility was materially restricted by fog, the distance was insufficient for him to stop his train, and it was moving about 15 m. p. h. when the collision occurred "about" 8:36 a. m., at which time it properly could have been at the west switch under the rule. If an "adequate block system" had been in use, the commission's report concluded, these opposing trains would not have been permitted to occupy the same block simultaneously, and the accident "might have been prevented."

### Representation of Employees

The Brotherhood of Locomotive Engineers and the Brotherhood of Locomotive Firemen and Enginemen came out where they started, following two recent elections in which each challenged the other's position as collective bargaining representative on the San Diego & Arizona Eastern.

The B. of L. E., representing the locomotive engineers, sought one of the elections in an effort to supplant the B. of L. F. & E. as representative of the firemen; and the B. of L. F. & E. sought the other election in an effort to supplant the B. of L. E. as engineers' representative. The National Mediation Board has certified that "no change in representation" was desired by either group.

Train dispatchers of the Chicago & Illinois Midland have chosen the American Train Dispatchers Association. And unions operating through the Railway Employees Department, American Federation of Labor, have been chosen by Norfolk & Portsmouth Belt Line shop employees.

### Will Report Social Insurance Bill Without Recommendation

The Senate interstate commerce subcommittee, which has been considering S. 293, the Senate version of proposed legislation embodying the Railway Labor Executives Association's program for liberalizing the Railroad Retirement and Railroad Unemployment Insurance acts, has decided to report the bill back to the full committee without recommendation, but with a factual report setting forth a detailed analysis of the measure.

The decision, reached at an executive

meeting last week, was announced by the subcommittee's chairman—Senator Johnson, Democrat of Colorado. S. 293 was introduced by Senators Wheeler of Montana and Wagner of New York, Democrats, the former being chairman of the interstate commerce committee. Representative Crosser, Democrat of Ohio, is sponsor of the companion House bill, H. R. 1362, which is pending before that body's committee on interstate and foreign commerce.

### Latest Revision of I. C. Act

The Interstate Commerce Commission publication embodying the text of the Interstate Commerce Act "together with text of certain supplementary acts and related sections of various other acts" has been revised to January 1, 1946. The volume is on sale for 60 cents by the Superintendent of Documents, Washington 25, D. C.

### Truck-Forwarder Joint-Rate Bill Signed by President

President Truman on February 20 signed H. R. 2764, the recently-enacted bill which directs the Interstate Commerce Commission to determine as a matter of permanent policy the terms and conditions under which freight forwarders may utilize the services and instrumentalities of motor carriers. Meanwhile, the bill permits continuance of present joint-rate arrangements between forwarders and motor carriers.

These joint-rate arrangements had been under a "death sentence," effective February 16, but the I. C. C. last week issued Special Permission No. 27983, which had the effect of authorizing an extension until March 15, pending further Congressional action on H. R. 2764, which had been passed by the House on February 9 (see *Railway Age* of February 16, page 378). Congressional action was completed when the Senate passed the House-approved bill without amendment on February 15.

The direction to the I. C. C. requires that the commission "shall at the earliest practicable date determine and by order prescribe the reasonable, just, and equitable terms . . . under which freight forwarders . . . may utilize the services and instrumentalities of common carriers by motor vehicle . . . under agreements between such freight forwarders and common carriers (which agreements may be required by the commission to be subject to its approval, disapproval, or modification), in such manner as will be in furtherance of the national transportation policy. . . ."

Then comes a proviso stipulating that in approving forwarder arrangements with truckers "in the case of line-haul transportation between concentration and break-bulk points in truckload lots," the commission "shall not permit payment to common carriers by motor vehicle of compensation which is lower than would be received under rates or charges established under Part II of this act, except to the extent that such lower compensation is found by the commission to be justified by reason of conditions under which the services and instrumentalities of common carriers by motor vehicle are utilized by freight for-



warders and the character of the services performed by common carriers by motor vehicle and by freight forwarders."

Having established the permanent arrangements, the commission would then specify a "reasonable time" for the discontinuance of the joint-rate arrangements as presently set up. Provisions of the bill are amendments to the Interstate Commerce Act's Part IV, the regulatory law for forwarders. The law originally contemplated that, after a specified transition period, the condemned joint-rate arrangements would be replaced by assembling and distribution rates published by the truckers. The lack of progress in that connection was the basis of the demand for enactment of H. R. 2764.

The Senate's favorable action came without a record vote after relatively brief debate wherein Chairman Wheeler of the committee on interstate commerce argued for passage while Senator Reed, Republican of Kansas, expressed his opposition. The bill had come to the Senate on February 13 with a favorable interstate commerce committee report to which Senator Reed dissented.

In that expression of his minority view, the Kansan stressed the opposition of an I. C. C. majority to passage of the legislation, and he went on to say for himself that he regarded it as a measure which "would open the doors to the very types of discrimination and under-the-table arrangements that were prohibited by the Hepburn Act of 1906." Senator Reed also said that "it is a matter of common knowledge and well known to me because of my contacts with numerous railroad officials, that, generally speaking railroad common carriers are opposed to the policy of rate-making authorized in this bill."

He went on to cite the opposition presentation made at the hearings by J. M. Hood, president of the American Short Line Railroad Association, and J. G. Kerr, chairman of the Southern Freight Association. "Officials of other railroads," the senator added, "privately explain their failure to appear and express their views on this matter because of the tremendous volume of traffic controlled by freight forwarders. . . . Through the hearings on Senate Resolution 146 (77th Congress) railroad traffic officials testified to the great pressure put upon them from this source. In addition to their official testimony of record, many came to me personally and added to what they had stated publicly. The common pattern of their story was 'for God's sake don't leave us at the mercy of freight forwarders by doing anything that would give them a status as common carriers, to enable them to demand a division of a joint rate. That is one thing we could not possibly withstand.'"

### Car Service Orders

By Service Order No. 454, effective February 21 through June 30, unless otherwise provided, the Interstate Commerce Commission has directed railroads to give preference over all other orders to filling orders for cars for loading with wheat, corn, meat, or other essential foodstuffs or seeds, provided an agent of the federal Department of Agriculture has certified on the car order that the shipment is des-

tined to a port on the Atlantic, Gulf or Pacific coast for the export relief program. In addition, port railroads are required to give preference to such cars when ordered for delivery, provided the waybill indicates the car has been loaded under the provisions of the order.

The order was issued at the request of the Department of Agriculture and the Office of Defense Transportation, and O. D. T. Director J. Monroe Johnson pointed out that it was in line with the President's request that government agencies take action to assure preferential movement of such products in order that maximum quantities might be made available for relief purposes.

By Second Revised Service Order No. 450 the commission has added to the provisions of earlier forms of this order, which prohibits placing box cars for loading grain at certain points in the Northwest for other than export direct or via designated inspection stations, the additional requirement that cars consigned to points in the switching districts of the Pacific ports named in the order shall not be delivered to flour or feed mills within such limits. The second revised version of this order is effective from February 17 through March 10.

Agent King's Order No. 7 has been further modified in the fifth revised version, effective February 13 to April 1 unless otherwise directed, extending the life of the order for a month and extending the area affected by it to include also Alabama, Mississippi and Texas. This order authorizes carriers in the states affected to reroute carload traffic by the most available route when accumulation or congestion prevent its current movement over designated routes.

Service Order No. 451, providing for rerouting traffic routed by the Canton & Carthage between Koch, Miss., and Canton, as a result of carrier disability arising from flood conditions, has been modified, by Amendment No. 1, to expire February 28.

### Bill Would Suspend RR Reorganizations

(Continued from page 415)

S. 1253 might work a hardship on the interests he represented, in that it would require termination of the Cotton Belt reorganization proceedings and therefore might leave them without further recourse, as a result of the operation of the statute of limitations, against the Southern Pacific. He suggested modifications in the language of the bill to avert this outcome, explaining that he did not oppose its general purpose and was in sympathy with legislation seeking to protect stockholders.

**Would Halt "Confiscation"**—Mr. Friedman also suggested certain amendments to the pending bill, but emphasized the view that the most important consideration was speedy enactment of legislation, even though imperfect, that would halt proceedings now in progress where confiscation of equities is proposed. Such legislation should give the stockholders of roads such as the Missouri Pacific, Frisco, and Rock Island as "fair treatment" as was received by those of roads such as the Baltimore & Ohio and Missouri-Kansas-Texas

that have effected debt modification programs without undergoing bankruptcy, he said. Pending passage of this legislation, he suggested, relief for equity holders of companies still in process of reorganization can be assured by action, either by the commission or the courts, suspending these procedures until the legislation can become effective.

The committee, Mr. Friedman said further, might also consider what he termed a seven-point program for the protection of equity holders, made up of the following provisions: Recalculation at current interest rates of unpaid high-rate interest on debt of reorganization roads; payment of such recalculated interest in convertible prior preferred stock; fixed-interest bonds should not exceed 40 per cent of capitalization, contingent-interest debt being substituted beyond that limit; old preferred stock either should remain as a junior issue or be exchanged in part for common; old common stock either should be undisturbed or should be allotted stock purchase warrants; the commission's reorganization powers should be limited and subjected to judicial review; and a staff of "experts" should be available to Congress to advise its committees on transportation legislation and commission actions.

The hearing is expected to be resumed next week, with representatives of various groups of security holders of roads likely to be affected by the proposed legislation scheduled to be heard.

### I. C. C. Denies Carrier Status to Allied Vans

Reporting on reconsideration of long-pending proceedings involving the status of Allied Van Lines, Inc., the Interstate Commerce Commission has found that the Motor Carrier Act's definition of a common carrier does not fit Allied's past or proposed future operations, and thus it has refused the certificate covering nationwide carriage of household goods which Allied sought, either under the Motor Carrier Act's "grandfather" clause or on the basis of present or future public convenience and necessity. The report by Commissioner Alldredge in No. MC-15735 reverses the prior report by the commission's Division 5, which would have issued a certificate to Allied on the basis of its showing of public convenience and necessity.

**One "Out" Still Pending**—The present report does not dispose of all Allied attempts to attain status as a common carrier of household goods between all points throughout the country. Still pending is the No. MC-F-2787 proceeding wherein Allied is proposing to build its nationwide rights by acquiring operating certificates from more than 300 truckers which are now its hauling agents. The commission now has before it Examiner Philip N. Crowley's proposed report recommending favorable action on this latest proposal (see *Railway Age* of December 29, 1945, page 1064).

Division 5's prior report in No. MC-15735 was reviewed in the *Railway Age* of November 18, 1944, page 789. As noted there, the division's favorable finding was bottomed on the so-called "C-service," a plan under which Allied has written agree-

ments with certain of its affiliates who agree to furnish on call certain equipment that may be dispatched indiscriminately by Allied without the usual effort to return such equipment to its home base. Meanwhile, the division found that Allied had no carrier status with respect to its so-called "A-service," which involves shipments hauled by its affiliates within the scope of their own certificates.

**10 Years' Litigation**—The "grandfather" application which the full commission has now denied was filed in February, 1936, while the public-convenience-and-necessity application, likewise now denied, was filed in October, 1939, "as a precautionary measure." Allied was organized in 1928 by the National Furniture Warehousemen's Association in an effort to coordinate the carrier facilities of its members and to solve the members' empty-mileage problems. The transactions for which commission approval is sought in the still-pending No. MC-F-2787 proceeding, mentioned above, contemplate the relinquishment by the Association of its control of Allied. Meanwhile, this proposed divorce will be accomplished under the consent decree entered recently in the United States District Court at Chicago in the anti-trust case brought by the Department of Justice against Allied, the National Association, and some 550 of the latter's members (see *Railway Age* of January 5, page 124).

Like Division 5's prior report, the present report of the full commission reviewed the Allied set-up and operations in considerable detail. Among other things, the commission noted in passing that Allied's original organizers did not intend that it should exercise its charter rights to function as an operating company; that it has owned no vehicles; that operating permits were obtained in only six states prior to the June 1, 1935, the Motor Carrier Act's "grandfather" date; that Allied conceded the right of the owner of a vehicle in "C-service" to demand its return at any time; that Allied was not registered as a carrier under the National Recovery Administration code of fair competition; and it was not required by the Office of Defense Transportation to obtain a certificate of war necessity as a carrier.

**Where Conflict Arises**—Leading up to its adverse finding on the "grandfather" application, the commission said that Allied's claims "are to a large extent in conflict with the claims of its members which have been recognized by the granting of certificates." It added that "authorities granted to Allied members cover substantially the entire United States," and "it is clear that two operating rights may not arise out of the same operations."

"It is our conclusion," the report went on, "that in those instances in which Allied gave directions to the drivers regarding the handling of surrendered shipments, Allied acted as an agent or vice principal for the driver's employer. It is our further conclusion that the function and purpose of Allied before, on, and at least for years after the critical date of June 1, 1935, was not to engage in the transportation of property by motor vehicle, but to serve as an agency for coordinating and

promoting the transportation business of its members, for avoiding empty mileage by facilitating the exchange of shipments between the members, and the suppression of what was regarded as unfair competition . . . . .

"In the nature of things, Allied, being a non-profit corporation controlled by the members could have no will or interest contrary to theirs. There was no intention to set up Allied as a carrier in competition with the members, and no such result was accomplished. The members were the persons who invested money in the transportation business and the profits and losses were theirs. Paraphrasing the language of the court in *Thompson v. U. S.*, 321 U. S. 19, 25, Allied was an independent carrier only by grace of contract nomenclature. By any realistic test it was a mere aid in carrying out the motor carrier operations of the members."

Coming to its consideration of the public-convenience-and-necessity application, the commission noted that, after the first recommended report in the proceeding, Allied prescribed "a form of lease" under which it would obtain the use of vehicles. The report went on to say, however, that the evidence "does not indicate that there has been any change in the practices of Allied or its members since adoption of this lease form."

Mention is also made of the steps taken for the divorcement of Allied from the National Association. Here the commission conceded that the changes may have the effect of relaxing to some extent "the 'closed shop' that has heretofore existed." It added, however, that "Allied remains a non-profit corporation wholly controlled by its members, most of whom are motor carriers under the act, each of whose operations duplicate in part the operating authority sought by Allied, and whose operations collectively cover substantially, if not entirely, the area proposed to be served by Allied."

**Members Are the Carriers**—The denial of the Allied applications means that all traffic handled by its hauling members within the scope of their own certificates should be handled in their own name and on their own responsibility, the report said. It added that shipments formerly handled beyond a hauling member's territory under

Allied's supposed "rights" must now be foregone or interchanged with connecting carriers.

"This," the commission added, "would involve principally long hauls. A large part of long hauls such as cross-country traffic is handled by rail rather than by motor vehicle. There are a large number of carriers authorized to transport household goods over large portions of the country and there are several nationwide operators. It does not appear that the public would suffer from lack of carriers authorized to perform any given services, but provision is made in the act for the extension of any carrier's operating authority and the granting of authority to new carriers, wherever the need is found to exist. Many carriers, both large and small, have successfully conducted household goods operations without the aid of a superimposed holder of a blanket certificate such as Allied is seeking. It should be recalled that the withdrawal of Allied from the field would not remove from service the vehicles which Allied lists as being used in its operations, because these vehicles do not belong to Allied but to its hauling members who will continue the use of these vehicles in their authorized operations."

Commissioner Lee in a brief dissenting expression said that the findings of Division 5's prior report were "fully supported by the record," and warranted the division's conclusion that a certificate should be granted Allied. Commissioner Patterson joined in this Lee view. Commissioner Miller's concurrence "in the result" of the majority report was noted, as was the fact that Commissioner Splawn did not participate in the disposition of the proceeding.

## Panel Board Report

The National Railway Labor Panel emergency board which investigated a dispute between the Brotherhood of Maintenance of Way Employees and the Copper Range has made its report to President Truman. The dispute involved paid-vacation arrangements, and the board recommended that the road incorporate into its agreement with the brotherhood the provisions of the February 23, 1945, vacations agreement entered into between the railroads generally and the non-operating employees.

## Materials and Prices

The following is a digest of orders, notices and information that have been issued by the Civilian Production Administration and the Office of Price Administration, since January 15 and which are of interest to railways:

**Cast Iron Radiation**—Under O. P. A. cast iron radiation industry directive No. 4 to priorities regulation No. 28, foundries making cast iron radiation are eligible to apply for "CC" preference rating for capital equipment, construction materials and production maintenance, repair and operating supplies.

**Clay Pipe**—O. P. A. has provided manufactures of vitrified clay, sewer pipe and allied products with uniform adjustment provisions for all such products, based on those now provided for most building materials, in amendment No. 17 to revised regulation No. 206, effective immediately.

**Hardwood Lumber**—O. P. A. raised producers' ceiling prices on certain "standard special" grades of hardwood lumber produced in Michigan, Wisconsin and Minnesota by 4 per cent in amend-

ment No. 15 to regulation No. 223, effective February 13.

An increase averaging 7 per cent in manufacturers' maximum prices for standard grades of hardwood lumber produced in the south central hardwood region is authorized by O. P. A. in amendment No. 20 to regulation No. 155 effective February 11.

**Industrial Reports**—The third issue of the "Bibliography of Scientific and Industrial Reports Distributed by the Office of the Publication Board" was recently placed on sale. Bibliographies are issued on a weekly basis. Reports listed in the bibliographies are grouped according to subject matter. The serial number, price, length, and title of each report in the listing are accompanied by a brief description of the report's contents.

The third issue contains 30 pages of abstracts, covering 302 reports under the following subject headings: chemicals and allied products, with 74 titles; electrical machinery, equipment and supplies, with 60 titles; fabricated metal products (except ordnance, machinery, and transportation



equipment), with one title; food and kindred products, with 19 titles; lumber and wood products (except furniture), with 6 titles; machinery (except electrical), 24 titles; ordnance and accessories, with 17 titles; primary metal industries, with 37 titles; products of petroleum and coal, with 13 titles; professional, scientific, and controlling instruments, photographic and optical goods, watches and clocks, with 11 titles; rubber products with 5 titles; stone, clay, and glass products, with 2 titles; textile mill products with 2 titles; and transportation equipment, with 31 titles.

The reports described in the listings contain information on scientific and technical developments, processes, products, inventions, and related matters of potential interest to American science and industry. This information previously was subject to security restrictions but has now been released for distribution by O. P. B. It includes data obtained in Germany, German-occupied countries, and Japan, as well as scientific and technical information obtained through U. S. Government sponsored research.

The price of the third issue is 15 cents. Since the prices of the bibliographies vary from week to week, in accordance with their size, a definite yearly subscription rate cannot yet be determined. However, the Superintendent of Documents will accept \$10 as initial payment for the service and will notify subscribers when additional remittance is required. Copies of the bibliographies also may be purchased singly. Orders for the bibliographies should be accompanied by check, money order or Superintendent of Documents coupons and should be addressed to the Superintendent of Documents, Government Printing Office, Washington 25, D. C.

**Lumber**—Lumber inspection services performed by nonprofit organizations not engaged in the business of selling or distributing lumber are suspended from O. P. A. price control. Laboratory testing services are also suspended in amendment No. 69 to revised supplementary regulation No. 11 to the general maximum price regulation, effective February 11.

**Magnet Wire**—Because of the extreme shortage of magnet wire, evidenced by the fact that producers will not accept new orders for most types for the next six months to a year. C. P. A. reduced allowable inventory in hands of consumers from 60 to 45 days, or a practicable working inventory, whichever is less in amendment No. 2 to priorities regulation No. 32.

**Manila Fiber**—A wider use of Manila fiber in the manufacture of rope, replacing a like quantity of sisal fiber, is permitted by C. P. A. in amending order No. M-84. The amended order also allows Manila rope to be manufactured in 1 1/4 in. diameter (3 3/4 in. circumference) and larger, plain and cable laid, within each processor's quota for any end use in addition to the end uses previously permitted by order No. M-84.

## Prices

**Hardwood Flooring**—A 10 per cent increase in manufacturers' ceiling prices for all standard grades of oak, pecan and miscellaneous hardwood flooring is authorized by O. P. A. in amendment No. 4 to regulation No. 458, effective at once.

**Rubber Flooring**—Manufacturers' ceiling for rubber flooring other than neoprene flooring have been raised approximately 11 per cent to offset changes since 1941 in raw material prices and in basic wage rates. Amendment 23 to O. P. A. regulation No. 149 is effective Feb. 18.

**Rubber Mats**—Manufacturers of rubber mats or matting may apply for individual adjustments in their ceiling prices under O. P. A. regulation No. 149, effective Feb. 18.

## Equipment and Supplies

### Railroad Equipment Production Delayed by Strike-Epidemic

Production of railroad equipment has been stopped entirely in some cases and seriously retarded in others by the current wave of strikes. Some locomotive building

plants were shut down completely when the steel workers went out. Car builders have been hampered by slow deliveries of specialties, which are estimated to have set back the production of passenger-train cars months behind anticipated schedules and to have interrupted freight car deliveries.

A spokesman for the General American Transportation Corporation states that the production of freight cars has been delayed by shortages of steel, lumber and miscellaneous parts for many months. Production was halted completely for several weeks during the recent strike of the steel workers due to walk-outs in General American plants. However, agreements with the steel workers' union were reached on February 15 and production was resumed as of that date. It was further stated that there has been considerable improvement during the past week.

The Greenville Steel Car Company reports its production has been cut in half because of material delays due to strikes in suppliers' plants and the Magor Car Corporation states that it is operating at a very limited rate of capacity due to shortages of steel. Only the Huntington, W. Va., plant of the American Car & Foundry Co. was involved in the steel strike, but the company's equipment production generally has been retarded by shortages of supplies.

The Pullman-Standard Car Manufacturing Company advises that there have been no recent strikes in their own plants, but that slow deliveries of various specialties have set back the production of passenger cars months behind anticipated schedules and have considerably delayed the construction of freight cars. Particularly troublesome have been shortages of glass and electrical equipment. The strike in the steel industry has had some effects on Pullman in the production of freight cars but, so far, has been a minor factor in delaying manufacture of passenger equipment. There has been no change in recent weeks.

The St. Louis Car Company presently is building only passenger-train equipment. It reports that deliveries have been retarded by delays in receipts of specialties and raw materials occasioned by strikes and that no noticeable improvement in the situation is yet apparent.

The American Locomotive Company's plant at Schenectady, N. Y., as well as some of its other plants making specialties, have been closed down since January 21 when the steel workers' union went on strike. All work on steam and Diesel locomotives has been at a standstill since that time. All production in Baldwin plants also was stopped by the same strike. Although there has been no strike in the Lima Locomotive Works' plant, production has been retarded because of delays in receipts of specialties and raw materials occasioned by strikes in suppliers' plants.

The Electro-Motive division of the General Motors Corporation reports that it is entirely shut down due to the strike of the United Auto Workers, which has been in effect since November 21. Another strike of members of the United Electrical Workers Union was settled some time ago, but due to the fact that the auto workers are still on strike, has had no effect on production at the Electro-Motive plant. A spokesman for the company advises that at least three weeks will be required to return to

full production after final settlement of the dispute between the corporation and the auto workers.

## FREIGHT CARS

The NEW YORK, NEW HAVEN & HARTFORD has ordered 75 caboose cars from the Harlan & Hollingsworth Corp.

The WHEELING & LAKE ERIE has ordered 750 60-ton steel twin hopper cars from the American Car & Foundry Co. and 750 50-ton gondola cars from the Ralston Steel Car Company. The inquiry for this equipment was reported in the *Railway Age* of February 2.

The ILLINOIS CENTRAL has ordered 100 70-ton covered hopper cars from the Pullman-Standard Car Manufacturing Company, at a cost of approximately \$500,000. These cars will bring to about 400 the railroad's fleet of covered hoppers which are used for the transportation of such commodities as cement, fluorspar, Fuller's earth and bauxite.

## SIGNALING

The Union Switch & Signal Co. is supplying 10 sets of continuous two-indication cab signal equipments with whistle and acknowledgment for installation on new Diesel freight locomotives now building for the DELAWARE, LACKAWANNA & WESTERN. This cab signal equipment is similar to that now installed on Lackawanna steam and Diesel-electric locomotives, and is to be used in service between Buffalo, N. Y., and Scranton, Pa.

The MISSOURI-KANSAS-TEXAS has placed an order with the Union Switch & Signal Co. covering the materials for the installation of absolute permissive block signaling on the 50-mile single-track territory between Stringtown, Okla., and Staley (Red River). This installation involves H-5 searchlight signals, with the necessary switch indicators, switch circuit controllers, rectifiers, relays, transformers and housings. The field installation work will be carried out by the regular signal construction forces of the railroad.

## Supply Trade

On March 1, the Cleveland, Ohio, district office of the **Okonite Company** will be moved to the Engineers building.

**Edwin T. Jackman**, district sales manager of the **Firth-Sterling Steel Company** in Chicago, has resigned after 18 years of service.

**Wilmot F. Wheeler**, executive vice-president and treasurer, has been elected president of the **American Chain & Cable Co.** of Bridgeport, Conn., to succeed the late William T. Morris.

**J. A. O'Brien**, vice-president of the **Johns-Manville Sales Corporation**, a subsidiary of the Johns-Manville Corporation, has been appointed manager of the power products and industrial department. He formerly was general sales manager

of that department. **H. R. Berlin** and **C. G. Dandrow** have been elected vice-presidents of the **Johns-Manville Sales Corporation**. Mr. Berlin has been appointed manager of the building materials and general department and Mr. Dandrow general sales manager of the power products and industrial department.

**Roy L. Morris**, formerly general signal inspector of the **Missouri Pacific**, has been appointed sales engineer of the **General Railway Signal Company**, with headquarters at St. Louis, Mo.

The **Ideal Commutator Dresser Company**, a partnership, has been terminated and a new corporation, **Ideal Industries, Inc.**, formed. There has been no change in the management or location of the company.

**Russell W. Boettiger** has been appointed sales manager of the **Leslie Co.**, Lyndhurst, N. J. Mr. Boettiger was graduated from **Cornell University** with a degree in mechanical engineering. He joined the Leslie organization in 1936 as sales and service engineer. Prior to that he was in plant engineering with the **General**



**Russell W. Boettiger**

**Foods Corporation**. In 1942, he was appointed chief planning engineer in charge of coordinating production with the requirements of the wartime shipbuilding program.

**James A. Houston** has been appointed director-eastern contract sales division of the **General Fireproofing Company**. Mr. Houston has been associated with the company since 1916 in sales engineering work.

**Walter A. Bowers** has been elected vice-president and treasurer of the **Aireon Manufacturing Corporation**. Mr. Bowers formerly was vice-president and treasurer of the **Lawrence Aeronautical Corporation** of **Lindon, N. J.**

**W. M. Stevenson**, sales and service engineer of the **Crucible Steel Company of America's** railroad division at **Cleveland, Ohio**, has been promoted to manager of the western railway department, with headquarters at **Chicago**.

**L. B. Gordon** has been appointed to the new position of director of engineering of the **Dayton Rubber Manufacturing**

**Company**. This groups all plant, electrical, power, and efficiency engineering as well as machine design and plant layout in one division.

**E. F. Leherissey** has been transferred to the southwestern district office of the **Safety Car Heating & Lighting Co.** with headquarters at **St. Louis, Mo.** Mr.



**E. F. Leherissey**

**Leherissey** has been employed by the **Safety Company** since 1934. He was an electrical inspector both at the factory and in the field until 1936 and since then a sales representative at **Chicago**. Prior to his present transfer, he was on leave of absence in war work for two and a half years.

**S. Wayne Hickey**, business manager of **Railway Engineering and Maintenance** and western manager, advertising sales, of **Simmons-Boardman Publishing Corporation**, publisher of **Railway Age**, **Railway Mechanical Engineer**, **Railway Signaling** and other railway periodicals, at **Chicago**, has been elected a vice-president of **Simmons-Boardman**, in addition to his other duties. Mr. Hickey was born at **Camden, Ark.**, on **December 7, 1905**, and received his higher education from the **University of Arkansas**. He entered rail-



**S. Wayne Hickey**

way service in **April, 1925**, as a gravel and ballast inspector on the **Illinois Central**, subsequently serving as chairman, rodman and valuation accountant on that road. In **April, 1931**, he became associated with

**Simmons-Boardman** as a member of its circulation department, at **Chicago**, and in **December, 1936**, he was advanced to advertising sales representative. Mr. Hickey was promoted to business manager of **Railway Engineering and Maintenance** and western manager, advertising sales of **Simmons-Boardman**, in **September, 1944**.

**Gwilym A. Price**, executive vice-president, has been elected president of the **Westinghouse Electric Corporation** to succeed **George H. Bucher**. Mr. Price will be the chief executive officer. **A. W. Robertson**, who as chairman has been the chief executive officer since 1929, has reached retirement age. He was elected chairman of the board of directors and will continue as a member of the **Westinghouse** organization in a less active capacity. Mr. **Bucher** was elected vice-chairman of the board and will continue to serve as chairman of the **Westinghouse Electric International Company**, which handles all the export business of the parent company, and will have other duties.

Mr. Price was graduated from the **University of Pittsburgh law school** in **1917**.



**Gwilym A. Price**

That same year he enlisted as a private in the army and was promoted to a captaincy in a heavy tank battalion which served overseas. After the war, he returned to the practice of law with the firm of **Beatty, Magee and Martin**, which he had served as a clerk while attending law school. He was appointed assistant trust officer of the **Pittsburgh Trust Company** in **1920** and a trust officer of the **Peoples-Pittsburgh Trust Company** in **1923**. He was elected a vice-president of this latter bank in **1930**, its vice-president in charge of trusts in **1937** and president in **January, 1940**. He was elected vice-president of **Westinghouse** in **September, 1943**, a member of the board in **January, 1945**, and executive vice-president in **May, 1945**.

The **Witte Engine Works**, a division of the **Oil Well Supply Company**, **Kansas City, Mo.**, has appointed the **T-Z Railway Equipment Company**, **Chicago**, as its national railway sales representative for its **Diesel engine** and **Diesel-electric** plants.

**L. C. Holloman**, formerly of the production department of the **Hewitt Rubber**



Corporation, has been appointed to the sales staff in charge of Rest-foam product development and sales to manufacturers in the furniture, transportation and allied fields.

**J. R. Lawrence**, who recently completed five years of service with the United States Navy, with the rank of commander, has been appointed a representative of the **Iron & Steel Products, Inc.**, in the southwest territory, with headquarters at Tulsa, Okla.

**J. C. Simmons** has been appointed vice-president of the **Rust-Oleum Corporation** and will supervise railway supply sales. Mr. Simmons has been associated with Rust-Oleum as general sales representative in the railway supply field. He will make his headquarters at the company's home office in Evanston, Ill.

**Henry H. Knapp** has been appointed service engineer of the railway equipment division of the **American Welding & Manufacturing Co.**, Warren, Ohio. Mr. Knapp attended the Mechanics' Institute and Columbia University, and in 1927 joined the equipment engineering division of the New York Central. From 1941 until he joined American Welding, he was system-wide special representative for the prevention of damage to car lading.

**Lawrence A. Pomeroy, Jr.**, has been appointed traffic manager of the **National Malleable & Steel Castings Co.** to succeed Carl L. Stripp, who has retired after 26 years of service with the company. Mr. Pomeroy recently returned from duty in the navy, serving in Washington in connection with shipping control and later in the Pacific. He previously had been with the freight traffic department of the New York Central for six years.

**C. L. Richard** has been appointed special representative of the scale division of **Fairbanks, Morse & Co.** with headquarters at Chicago. Mr. Richard was a member of the National Bureau of Standards staff for 19 years. During the past three years he has served the ordnance bureau of the U. S. War Department as advisor and consultant on problems of gaging and weighing in the ammunition production industry.

**David W. Odiorne** has been appointed railway engineer by the **Edgewater Steel Company**, Pittsburgh, Pa., with headquarters at the company's home office in Oakmont, Pa. Mr. Odiorne was graduated from the Stevens Institute of Technology in 1923 with a degree in mechanical engineering. For the following 19 years he was employed with the New York Central. In March, 1942, he was granted a leave of absence for the duration of the war, to assume the position of chief of the rolling section of the transportation equipment division of the War Production Board in Washington, D. C.

The **Menasco Manufacturing Company** has appointed district representatives in New England, New York, Pennsylvania, West Virginia and Ohio territories to handle Malabar specialized lifting equipment for railroads. Malabar is a product

division of Menasco, featuring hydraulic jacks for railroads and other industries. The appointments are: **Walter R. Collins Company**, New York; **E. Loyd Ettenger**, Washington, D. C., and **W. J. Church**, New Orleans, La. These representatives will cover the New York area, the middle Atlantic territory, and the western Texas and Louisiana territories respectively.

**L. E. Osborne** has been appointed senior operating vice-president in charge of all manufacturing units of the **Westinghouse Electric Corporation**. Mr. Osborne's new responsibilities also include all subsidiary manufacturing companies as well as the district manufacturing and repair department and the headquarters manufacturing division of Westinghouse. His office has been transferred to the company's Pittsburgh, Pa., headquarters.

Mr. Osborne began his career with Westinghouse in September, 1910, at the age of 16, as a clerk in the tool room of the East Pittsburgh works and six months later was promoted to an office job. He was transferred to a job operating a lathe in the plant's tool room, during which time he continued his studies by taking correspondence courses in mechanical engineering and industrial management. He was employed as an operator of milling machines and lathes until 1915, when he was assigned to train new men. He was advanced to night foreman of the tool room and in 1926 assigned to the time study department for several months and then appointed general foreman of the tool room. A year later he was appointed assistant superintendent of the tool room and in another year was promoted to superintendent. He was appointed superintendent of the metal stamping department at the East Pittsburgh works in November, 1930, assistant works manager of the Westinghouse meter division in Newark, N. J., in 1931, and a few months later works manager there. He was transferred to the East Springfield, Mass., plant as works manager in 1934 and appointed manager of manufacturing and engineering for the entire appliance division, with headquarters in Mansfield, Ohio, in 1939.

Throughout the war he was the directing head of the company's steam division at South Philadelphia, Pa., and since early 1943, he also was responsible for the adjoining merchant marine division, which Westinghouse operated for the United States Maritime Commission. He was elected vice-president in charge of the South Philadelphia operations in May, 1942. Simultaneously with his supervision of the production of propulsion equipment for ships, he directed the development at South Philadelphia of gas turbine and jet propulsion aircraft engines for the Navy. In 1945 he organized a new aviation gas turbine division and brought to near-completion manufacturing and research facilities for the continued development and production of these Westinghouse engines in peacetime. He was transferred to the steam division directly from several months' national defense service as chief of heavy ordnance, of the ordnance branch of the Office of Production Management. He had been granted a leave of absence by Westinghouse in January, 1941.

## Financial

**CHICAGO, ST. PAUL, MINNEAPOLIS & OMAHA.—Equipment Trust Certificates.**—Division 4 of the Interstate Commerce Commission has authorized this company to assume liability for \$950,000 of 1½ per cent equipment trust certificates, sold at 100.159 to Halsey, Stuart & Company and others, in connection with its acquisition at \$3,188 each of 400 70-ton gondola cars from the Bethlehem Steel Company.

**GULF, MOBILE & OHIO-ALTON.—Merger.**—A petition was filed on February 19 before Federal Judge John P. Barnes at Chicago seeking approval of the plan to merge the Alton with the Gulf, Mobile & Ohio. The plan was taken under advisement and at the same time Judge Barnes set March 6 as final date on which petitions for fees and allowances could be filed and scheduled a hearing on fees for April 3. The request for approval of the plan was filed by Louis Boehm, New York, head of a committee which represents holders of \$36,000,000 of the \$45,000,000 bonds outstanding, who explained that the public, other than the bondholders, was not involved. The proposal under which the two roads would merge has already been approved by the Interstate Commerce Commission.

**MISSOURI PACIFIC.—Comstock Appeal Denied.**—A petition of the Andrew W. Comstock group to appeal from a ruling in the Missouri Pacific reorganization which approved an \$18,000,000 claim, with interest, of the road against its subsidiary, the New Orleans, Texas & Mexico, has been refused by Federal Judge George H. Moore at St. Louis, Mo. The Comstock interests had filed a request for permission to enter an appeal in the United States Circuit court in the name of Guy A. Thompson, as trustee of the subsidiary railroad, on the grounds that the M. P. claim against the N. O. T. & M. is unjustified by the road's earnings. The objectors are holders of 5¼ per cent convertible bonds secured by N. O. T. & M. stock, the value of which was affected by allowance of the claim. According to the Comstock petition, the subsidiary had not had the protection of an independent trustee, since Mr. Thompson is also trustee of the parent company.

**SOUTHERN PACIFIC.—Awards Bonds.**—On February 18, the Southern Pacific awarded \$50,000,000 of new first mortgage bonds, series F, maturing January 1, 1996, to Halsey, Stuart & Co. and associates on a bid of 99.52 for a 2¾ per cent coupon, a net interest cost to the railroad of 2.768 per cent. The bonds were reoffered at 100. (Previous item in *Railway Age* of February 16, page 384.)

**SOUTHERN PACIFIC.—Refunding.**—Division 4 of the Interstate Commerce Commission has authorized the Southern Pacific Railroad to issue \$50,000,000 of series E 2½ per cent first mortgage bonds due in 1986, sold at 100.6599 to Kuhn, Loeb & Company and others, the proceeds to be applied, with other funds, to the redemption at 103¼ of a like principal amount of series B 3¼ per cent first mortgage bonds due in 1986. A net reduction in charges to

maturity of \$12,993,223 is expected to result from the operation.

**UNION PACIFIC.—Refunding.**—Division 4 of the Interstate Commerce Commission has authorized this company to issue \$44,493,000 of 2½ per cent debenture bonds, due in 1976, which have been sold at 107.789 to Halsey, Stuart & Company and others, making the annual average cost to the road about 2½ per cent, reported in financial quarters to be the lowest interest cost in American railroad history for securities of this type. The proceeds are to be applied, in part, to the retirement at 103 of \$44,717,000 of 3½ per cent debenture bonds due in 1970 now outstanding. Without regard to income tax adjustments, the transaction is expected to result in a net saving to maturity of \$8,844,860.

#### Average Prices Stocks and Bonds

	Feb. 19	Last week	Last year
Average price of 20 representative railway stocks..	62.28	68.86	51.39
Average price of 20 representative railway bonds..	102.26	102.85	86.73

#### Dividends Declared

Canadian Pacific.—Ordinary, irregular, 75¢ (in Canadian funds), payable March 30 to holders of record February 25.

Fort Wayne & Jackson.—5½% preferred, semi-annually, \$2.75, payable March 1 to holders of record February 20.

Minneapolis & St. Louis.—\$1.00, payable March 15 to holders of record March 1.

North Pennsylvania.—Quarterly, \$1.00, payable March 9 to holders of record March 2.

Wheeling & Lake Erie.—75¢, payable April 1 to holders of record March 20.

### Abandonments

**CHICAGO, ATTICA & SOUTHERN.**—In a proposed report Examiner J. S. Prichard has recommended that Division 4 of the Interstate Commerce Commission permit this road's abandonment, as to interstate commerce, by Dulien Steel Products, Inc., its owner, subject to the condition that the line or any portion be sold at net salvage value to any responsible purchaser willing to operate it. The line involved, from Veedersburg, Ind., to Morocco, 62.1 miles, is the remaining portion of a 140-mile line at one time operated by the Coal Railway division of the Chicago & Eastern Illinois, and abandonment of the entire property was proposed in 1942 by the receiver then in possession, but this proposal was modified and about 86 miles, including the segment here referred to, was sold to Dulien. Dulien subsequently asked for authority to abandon the entire property, but the application as to this part was denied on the ground that there was a public need for its continued operation for the duration of the war, the denial being without prejudice to a renewal of the application after the war ended. Although the U. S. Department of Agriculture, the Public Service Commission of Indiana and various industries served by the line still object to its abandonment, the examiner concluded that "there appears to be no longer any hope that the line can be operated successfully." It was estimated that rehabilitation would cost \$500,000, and the examiner expressed the opinion that such expenditure would be "unreasonable" in view of the evidence that only a small amount of its business is in communities not on other railroads.

## Railway Officers

### EXECUTIVE

**W. H. Guild**, whose election to vice-president of the Union Pacific, with headquarters at Omaha, Neb., was reported in the *Railway Age* of February 2, was born in Omaha on October 25, 1883, and entered railway service in 1899 as an office boy in the office of the superintendent of transportation of the Union Pacific at Omaha. In 1903 he became secretary to the general superintendent, and then, until 1915, held various clerical positions. In the latter year he became chief clerk to the general manager, and in 1918 was promoted to assistant to the general manager. He held the latter position until 1922, when he was promoted to assistant to the vice-president, which position he held until 1928, when he was made general superintendent, with headquarters at Kansas City, Mo. On December 1, 1936, he was promoted to executive assistant, with headquarters at Denver, Colo., and on April 1, 1938, he was advanced to general manager of the South-Central district, with headquarters at Salt

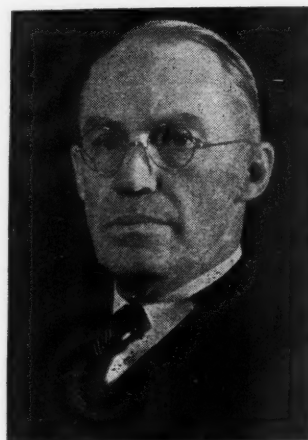


W. H. Guild

Lake City. Mr. Guild was promoted to vice-president in charge of operations, with headquarters at Omaha, on June 16, 1940, and on July 26, 1941, he was advanced to executive assistant at Los Angeles, Cal., the position he held at the time of his recent appointment.

**Charles H. Buford**, whose election as executive vice-president of the Chicago, Milwaukee, St. Paul & Pacific, with headquarters at Chicago, was reported in the *Railway Age* of February 16, was graduated in civil engineering from the University of Arkansas in 1907, and immediately entered railway service as an instrumentman in the engineering department of the Milwaukee. In 1908, he was appointed a draftsman in the bridge department in the general offices at Chicago, and in 1910 he went with the Atchison, Topeka & Santa Fe as a designing and estimating engineer in the office of the chief engineer at Chicago. He returned to the Milwaukee in 1913, as assistant engineer on the Chicago track elevation work, and was subsequently promoted to engineer of track elevation at

Chicago. In April, 1917, he was advanced to trainmaster of the Sioux City and Dakota division, with headquarters at Sioux City, Iowa, and in February, 1918, he was transferred to the LaCrosse division, with headquarters at Milwaukee, Wis. Mr. Buford was advanced to superintendent of the Wisconsin Valley division, with headquarters at Wausau, Wis., in July, 1918, and the following November was transferred to the Superior division, with headquarters at Green Bay, Wis. In August, 1919, he was transferred to the Sioux City and Dakota division, with headquarters at Sioux City, and in November, 1921, he was transferred to the Terre Haute division, with headquarters at Terre Haute, Ind.



Charles H. Buford

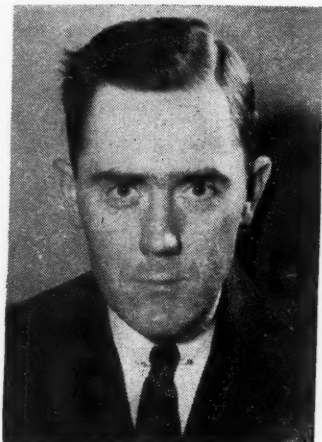
He was promoted to general superintendent, Southern district, with headquarters at Chicago, in October, 1924, and on November 15, 1925, he was further advanced to assistant general manager of the Eastern lines, with the same headquarters. Mr. Buford was promoted to general manager of the Western lines, with headquarters at Seattle on November 1, 1927, and served in that capacity until October 1, 1939, when he was elected vice-president in charge of operations and maintenance of the Association of American Railroads, with headquarters in Washington, D. C., the position he held at the time of his recent election.

**Col. Lacey V. Murrow**, just released from military service, has been appointed assistant to vice-president, operations and maintenance department, Association of American Railroads, in charge of matters pertaining to competitive forms of transportation—water, highway and air. Among his duties will be matters relating to grade crossing elimination, formerly handled by the engineer of grade crossings of the association, and by the secretary of the Committee on Grade Crossing Elimination. Colonel Murrow succeeds Arthur Anderson, who is returning to former duties on the New York Central System. Colonel Murrow comes to the association following a number of years experience in highway and aviation work, having been director of highways for the State of Washington from 1932 to 1940, and was intimately associated with air transportation during the war.

**Robert M. Edgar**, whose appointment as assistant to the president of the Boston & Maine and the Maine Central was an-



nounced in the February 16 issue of *Railway Age*, was graduated from Dartmouth College in 1928 and entered the service of the B. & M. in January, 1929, as a rate clerk. In 1936 he went with the Montpelier & Wells River and the St. Johnsbury & Lake Champlain as assistant gen-



**Robert M. Edgar**

eral freight agent, returning to the Boston & Maine in January, 1938, as commerce agent. In June, 1938, he was promoted to division freight agent of the New Hampshire division at Concord, N. H., then again advanced in January, 1941, to assistant general freight agent at Boston, Mass. He was appointed assistant to the executive vice-president of the Maine Central, with headquarters at Portland, Me., in May, 1944, and has held this post until his recent promotion. Mr. Edgar now maintains offices both at Boston and Portland.

## FINANCIAL, LEGAL AND ACCOUNTING

**Paul Drewry Fox**, whose appointment as general auditor of the Pennsylvania at Philadelphia, Pa., was announced in the *Railway Age* of January 26, was born on October 8, 1908, at Richmond, Va. A graduate of the Virginia Military Institute



**Paul Drewry Fox**

(B.S., civil engineering, 1930), he also did post-graduate study in accounting at the University of Pennsylvania. Mr. Fox entered the service of the Pennsylvania in

1930 as assistant in the engineering corps at Wilmington, Del., later serving in that capacity on the Williamsport, Philadelphia, and Atlantic divisions until 1932, when he joined the Standard Oil Company of New Jersey. In 1934 he returned to the Pennsylvania as assistant supervisor of track, serving successively on the Philadelphia, Tyrone, Altoona, and Middle divisions. In 1935 he was assigned to special duty in the office of the vice-president and comptroller, and became supervisor of track, Warren, Pa., in 1937. Mr. Fox returned to the vice-president and comptroller's department the same year, where in 1939 he was advanced to assistant to the comptroller. He was promoted to auditor of disbursements in 1941 and to deputy controller in 1943, maintaining the latter position until his recent advancement.

**E. E. McInnis**, whose appointment as vice-president and general counsel of the Atchison, Topeka & Santa Fe, with headquarters at Chicago, was reported in the *Railway Age* of February 9, was born at Monticello, Miss., on October 12, 1882, and received his higher education at Austin College, Sherman, Tex., and at the University of Texas, having been graduated from the latter in 1904. Mr. McInnis entered railroad service in 1921 as an at-



**E. E. McInnis**

torney for the Santa Fe at Oklahoma City, Okla., and served there until 1923, when he was appointed solicitor for Oklahoma, with the same headquarters. In 1926 he became general solicitor at Chicago, and in 1933, he was advanced to general counsel, with the same headquarters, the position he held at the time of his recent promotion.

**William C. Purnell**, recently returned from military service with the rank of colonel, has resumed his position as general attorney for the Western Maryland.

**A. V. B. Gilbert**, treasurer of the Atlanta, Birmingham & Coast at Atlanta, Ga., has been appointed assistant treasurer of the Atlantic Coast Line there.

**Elmer Hart**, whose appointment as comptroller of the Pennsylvania at Philadelphia, Pa., was announced in the *Railway Age* of January 26, was born on October 25, 1883, at Philadelphia, and entered railroading in May, 1900, as a junior clerk in the accounting department of the Pennsylvania. He served in various clerical

capacities until November, 1910, when he was appointed acting inspector of accounts, becoming inspector of accounts in August, 1912. In December, 1918, he was named special assistant on the staff of the assistant comptroller, then, at the conclusion of federal control of the railroads, was assigned to special duties in the office of the



**Elmer Hart**

comptroller. In 1926 he became chief special agent in the accounting department, then assistant to comptroller in 1927, and later that year assistant comptroller. Mr. Hart was promoted to assistant deputy comptroller in 1929, and, in 1943, general auditor, maintaining the latter post until his recent advancement.

**Gilbert H. Heim**, whose appointment as assistant comptroller of the Pennsylvania at Philadelphia, Pa., was announced in the January 26 *Railway Age*, was born at Philadelphia on July 8, 1886, and began his railway career in July, 1903, as a clerk in the accounting department of the Pennsylvania. From 1920 to 1939, he served



**Gilbert H. Heim**

successively as tax clerk, assistant chief clerk, chief clerk, and general accountant. In January, 1939, he was advanced to assistant to the comptroller, and in October, 1942, to assistant comptroller. Mr. Heim became deputy comptroller in June, 1945, and maintained this position until his appointment as assistant comptroller became effective on January 16.

## OPERATING

**W. N. Deramus, III**, has been appointed assistant to the general manager of the Kansas City Southern, with headquarters at Kansas City, Mo.

**C. N. Campbell** has been appointed trainmaster of the Illinois Central at Baton Rouge, La., succeeding **J. P. Hoff**, who has been transferred to the Meridian, Vicksburg, Natchez, Clinton, and Woodville districts, with headquarters at Vicksburg, Miss. **R. E. Lees** has been appointed trainmaster at Memphis, Tenn., replacing **E. H. Buelow**, who has been transferred to Grenada, Miss., where he replaces **H. J. Houck**, who has been assigned to other duties. The jurisdiction of **H. F. Wilson**, trainmaster of the Shreveport district, with headquarters at Vicksburg, has been extended to include the Vicksburg Yard.

**W. L. Wilson**, whose promotion to superintendent of the Kenora division of the Canadian Pacific, with headquarters at Kenora, Ont., was reported in the *Railway Age* of February 9, was born at Calvin, Ont., on June 24, 1897, and entered railway service in June, 1912, as an extra gang timekeeper at Mattawa, Ont. He held several minor positions at various points on the road until August, 1918, when he was advanced to trainmaster, with headquarters at Schreiber, Ont., later serving as trainman, yardman and relieving trainmaster at Smith Falls, Ont. On May 1, 1941, Mr. Wilson was promoted to assistant superintendent of the Trenton division, with headquarters at Toronto, Ont., and on January 1, 1943, he was transferred to the Smith Falls division, with headquarters at Ottawa, Ont. On November 1 of the same year he was transferred to the Calgary division, with headquarters at Calgary, Alta. Mr. Wilson was appointed re-



**W. L. Wilson**

lieving superintendent at Medicine Hat, Alta., on October 1, 1944, and served there until January 1, 1945, when he was assigned to the position he held at the time of his recent promotion.

**F. A. Burroughs, Jr.**, whose promotion to superintendent of the Mobile division of the Southern, with headquarters at Selma, Ala., was reported in the *Railway Age* of February 2, was born at Raleigh, N. C., on June 19, 1905, received his

higher education at Lake Forest College, entered railroad service on December 5, 1929, as a student apprentice on the Danville division of the Southern, and served in that capacity until June 30, 1934, when he became assistant bridge and building supervisor on the St. Louis division. On November 1, 1936, he was appointed track supervisor on the same division, and served there until he was transferred to the Birmingham division on August 16, 1937. He was appointed assistant trainmaster on March 1, 1942, advanced to trainmaster of the Winston-Salem division on February 1, 1943, and transferred to the Washington division on March 16, 1944. On September 24, 1944, Mr. Burroughs was advanced to assistant superintendent, the position he was holding at the time of his recent promotion.

## TRAFFIC

**C. R. Van Horn**, whose appointment as general passenger agent of the Baltimore & Ohio at New York was announced in the *Railway Age* of February 16, began his railway career as a car helper for the B. & O. at Baltimore, Md., in 1923. He became a steward in the dining car department in 1927, then entered the passenger department in 1929, as a clerk at Cincinnati,



**C. R. Van Horn**

Ohio, where he advanced to passenger representative in 1932. He was promoted to division passenger agent at Columbus, Ohio, in 1932, then transferred successively to Akron, Ohio, in 1936; Pittsburgh, Pa., in 1939; and Philadelphia, Pa., in 1941. Mr. Van Horn was appointed assistant general passenger agent at St. Louis, Mo., in 1944, which post he held until his recent advancement.

**Carl B. Hall, Jr.**, has been appointed district freight and passenger agent of the Southern, with headquarters at Lexington, Ky., succeeding **W. R. Clinkinbeard**, deceased.

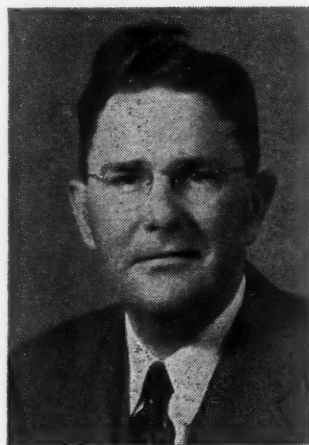
**Lt. Col. William J. Seibert**, recently returned from military service, has resumed his former position as general agent for the Kansas City Southern at Cleveland, Ohio.

**L. A. Jones** has been appointed district freight agent of the Seaboard Air Line at Palmetto, Fla., succeeding **J. E. Best**,

who has become freight traffic representative there. Mr. Best requested this change in his position because of the state of his health.

**Harry E. Yerkes**, assistant general passenger agent of the Central of New Jersey, has been appointed passenger traffic manager at New York, succeeding **Col. Walter V. Shipley**, who has retired after 17 years as head of the passenger department.

**Frank Wilson**, whose promotion to general freight agent of the Texas & Pacific, with headquarters at Dallas, Tex., was reported in the *Railway Age* of February 9,



**Frank Wilson**

was born at Paris, Tex., on December 14, 1897, entered railroad service on July 15, 1920, as a clerk on the Texas & Pacific at Paris, and served in that capacity until February, 1922, when he became soliciting freight agent at New Orleans, La. In May, 1924, he was appointed traveling freight agent at Texarkana, Tex., and served there until August 1, 1926, on which date he was promoted to general agent, with the same headquarters. On July 1, 1938, Mr. Wilson was transferred to Fort Worth, Tex., as general agent, and on October 1, 1945, he was advanced to the position of assistant general freight agent at Dallas, the position he held at the time of his recent promotion.

**W. P. Stuart**, assistant general freight agent of the Pennsylvania at Pittsburgh, Pa., has been appointed general coal and ore agent at Cleveland, Ohio. **E. W. Saville**, also assistant general freight agent at Pittsburgh, has been advanced to take over Mr. Stuart's duties, and is succeeded by **R. E. Walton**, whose appointment to this post was noted in the January 19 issue of *Railway Age*.

**E. E. Sharps**, whose promotion to general freight agent, solicitation, of the Pere Marquette, with headquarters at Detroit, Mich., was reported in the *Railway Age* of February 2, was born at Oxford, N. J., on February 16, 1892, entered railroad service in September, 1910, and served on two other roads until 1912, when he entered the service of the Pere Marquette as chief clerk at New York. In 1914 he became traffic representative at the same place, advancing to commercial agent in



1929. In 1931, Mr. Sharps was promoted to division freight agent at Detroit, Mich., and on October 1, 1945 to the position of assistant general freight agent, with the same headquarters, the position he held at the time of his recent promotion.

**R. J. Beggs**, whose appointment as general freight agent of the Baltimore & Ohio at Baltimore, Md., was announced in the *Railway Age* of January 26, was born in Carroll County, Md., on April 14, 1887,



**R. J. Beggs**

and attended Baltimore City College. He entered railroading in 1902 as a clerk for the B. & O. at Baltimore, subsequently became a stenographer and a rate clerk, and advancing to chief clerk to division freight agent at Cumberland, Md., in 1908. He was named chief rate clerk in the general freight office at Baltimore in 1920, division freight agent at Cumberland in 1922, then assistant general freight agent at Baltimore in 1924. Mr. Beggs was promoted to assistant to freight traffic manager at Baltimore in 1930, and maintained this position until his recent advancement.

**Col. J. A. Cunningham**, whose appointment as manager of merchandise traffic of the New York, New Haven & Hartford at Boston, Mass., was announced in



**Col. J. A. Cunningham**

the *Railway Age* of February 2, was born at Montreal, Que., in 1890, and joined the New Haven in June, 1930. He rose to

the post of division superintendent at Providence, R. I., in February, 1928, then, in July, 1929, was appointed freight traffic manager of the New Haven's highway subsidiary, the New England Transportation Company. Promoted to traffic development agent in 1934, he maintained this position until he entered military service in 1941. Col. Cunningham had also served in World War I, rising to the rank of captain in the 14th Engineer regiment. In World War II he commanded combat engineers in the Pacific theater.

**C. R. Seel**, whose appointment as Eastern traffic manager of the Chicago Great Western, with headquarters at New York, was announced in the January 19 *Railway Age*, was born at Detroit, Mich., on January 1, 1913. He entered railroading in 1935 as chief clerk in the division freight and passenger agent's office of the Chicago Great Western at Mason City, Iowa. He was promoted to traffic agent there in 1937, transferring to Pittsburgh, Pa., in 1940, where he became general agent in 1941. Mr. Seel maintained the latter position until his advancement to Eastern traffic manager on January 15.

**William J. Fillingim**, foreign freight traffic manager of the New York, New Haven & Hartford at Boston, Mass., has been appointed district traffic manager there. He is succeeded by **Irving T.**



**Irving T. Sorge**

**Sorge**, whose appointment was announced in the February 2 *Railway Age*.

Mr. Sorge was born at Staten Island, N. Y., on April 5, 1898, and was graduated from Westerleigh Collegiate Institute. He entered railway service with the Baltimore & Ohio at New York, soon leaving, however, to join the United States Navy during World War I. He worked for the Dollar Steamship Line (later the American President Lines) after his return, advancing to general agent in charge of New England territory by January, 1924, and later manager of the New York office of the American President Lines. In November, 1943, Mr. Sorge was appointed special assistant to the Atlantic coast director of the War Shipping Administration, with headquarters at Boston, and maintained this position until shortly before joining the New Haven.

## ENGINEERING & SIGNALING

**John W. Demcoe**, whose appointment as engineer maintenance of way of the Canadian National at Toronto, Ont., was announced in the February 9 *Railway Age*, was born at Kenora, Ont., and was graduated from the University of Manitoba (B. Sc., civil engineering, 1939). He entered railway service with the Canadian National in August, 1939, as a structural draftsman at Toronto, Ont., advancing to



**John W. Demcoe**

instrumentman a year later. In November, 1942, he was promoted to assistant engineer, then went to London, Ont., as assistant division engineer in February, 1944. He returned to Toronto as division engineer in May, 1945, maintaining this position until his advancement to engineer maintenance of way became effective on January 23.

**H. W. Flemming**, whose promotion to chief engineer of the Grand Trunk Western, with headquarters at Detroit, Mich., was reported in the *Railway Age* of February 9, was born at Liverpool, N. S., on January 22, 1886, received his higher education at Dalhousie University, and entered railroad service in October, 1909, as a rodman on the Canadian National. From 1910 to 1921 he served as resident engineer

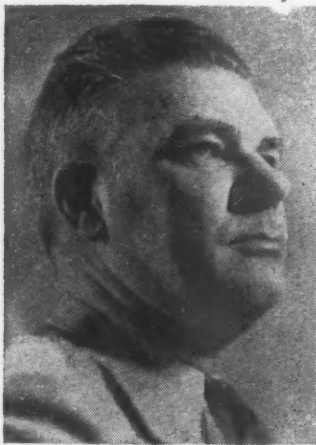


**H. W. Flemming**

at various points in Ontario and Quebec, being appointed inspecting engineer in the latter year and serving in that capacity

until 1924, when he was advanced to division engineer at Hornepayne, Ont. In March, 1928, Mr. Flemming was transferred to Montreal, Que., where he remained until July, 1944, when he was promoted to district engineer of the North Ontario district. Later in 1944 he was transferred to the Southern Ontario district. In April, 1945, he was advanced to engineer, maintenance of way, of the Central region, with headquarters at Toronto, the position he held at the time of his recent promotion.

**L. A. Gillett**, regional director, Northeastern region, of the Federal Works Agency, with headquarters at New York, has been appointed assistant chief engineer of the Virginian, at Norfolk, Va., succeeding **A. H. Chapman**, who has retired after 40 years' service. Mr. Gillett was born on March 1, 1897, at Newburyport, Mass., and was graduated from the Massachusetts Institute of Technology in 1918. After a short period of service in the United States Army in 1918, he began his career as a rodman for the Virginian in December, 1918. From July, 1919, to July, 1923, he served consecutively with the Highway Department of the State of Illinois; the Abernethy Construction Com-



**L. A. Gillett**

pany, Boston, Mass.; the Department of Public Health of the State of Massachusetts, and Weston & Sampson Consulting Engineers, at Boston. He then joined the Florida East Coast as structural engineer at St. Augustine, Fla., leaving to serve in the same capacity for the Cincinnati Union Terminal at Cincinnati, Ohio, in February, 1928. Mr. Gillett was appointed director of the Federal Works Program in the Southwestern district of Ohio, with headquarters at Cincinnati, in 1934. He became regional director of the Federal Works Agency in 1942, with jurisdiction over six states, Midwestern region, and headquarters at Chicago. He was transferred to New York, with jurisdiction over nine Northeastern states, in 1944.

**E. S. Birkenwald**, whose promotion to engineer of bridges of the Southern, with headquarters at Cincinnati, Ohio, was reported in the *Railway Age* of February 2, was born at Milwaukee, Wis., on May 30, 1901, received his higher education at the University of Wisconsin and at Massachusetts Institute of Technology, and entered railroad service on November 20, 1924,

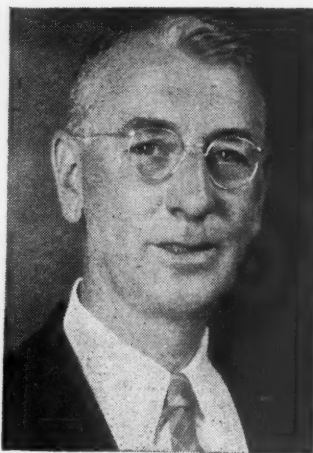
as a bridge inspector on the Southern at Charlotte, N. C. From June 1, 1925, to July 31, 1934, he served as assistant engineer at Charlotte. On August 1, 1934, Mr. Birkenwald was transferred to Knoxville, Tenn., as assistant engineer in the bridge



**E. S. Birkenwald**

department, and served in that capacity until January 1, 1946, when he was promoted to assistant engineer of bridges, the position he held at the time of his recent promotion.

**Hector King Morrison**, whose appointment as district engineer of the Canadian National at Montreal, Que., was announced in the *Railway Age* of February 9, was born at Dartmouth, N. S., in 1887. He began his railway career as a chainman for the Halifax and Southwestern (now C. N. R.) in 1901, later serving the Quebec & Lake St. John (now C. N. R.). In 1905, he joined the Canadian Northern (now C. N. R.), serving successively as topographer, leveller, transitman, engineer, and resident engineer at



**Hector King Morrison**

Pembroke, Ont. After overseas service with the C. E. F. during World War I, Mr. Morrison returned to the Canadian Northern as division engineer at Hornepayne, Ont., transferring to Montreal in 1920, and, following the formation of the Canadian National, served as assistant engineer at various points in Quebec and Ontario. He was promoted to district engineer for the survey and construction of the Rouyn-Senneterre branch line in 1936, and then resident engineer of the

Montreal terminal development in 1939. Advanced to terminal engineer at Montreal in 1942, he maintained this position until his promotion became effective on January 17.

**W. J. Martin**, chief engineer and industrial commissioner of the Northeast Oklahoma, at Miami, Okla., has been promoted to chief engineer and assistant to the president, with the same headquarters.

**E. J. Zapfe** has been appointed assistant chief engineer of the Green Bay & Western; the Kewaunee, Green Bay & Western; and the Ahnapee & Western, with headquarters at Green Bay, Wis.

**L. W. Green**, assistant division engineer of the Pennsylvania at Altoona, Pa., has been promoted to division engineer of the Delmarva division at Cape Charles, Va., succeeding **Michael Lipman**, who has retired.

**John C. Nichols**, whose promotion to bridge engineer of the Louisville & Nashville, with headquarters at Louisville, Ky., was reported in the *Railway Age* of January 26, was born at County Corners, Iowa, on January 9, 1896, received his higher education at Iowa State College, entered railroad service on May 16, 1923, as a draftsman in the bridge department of the Louisville & Nashville, and served in that



**John C. Nichols**

capacity until May 1, 1928, when he became assistant engineer. On February 15, 1930, he was appointed assistant bridge inspector, and on March 1, 1937, he was promoted to bridge inspector. Mr. Nichols was advanced to assistant bridge engineer on October 1, 1943, and served in that capacity until February 1, 1945, when he was advanced to associate bridge engineer, the position he held at the time of his recent promotion.

**H. O. Waddell**, assistant division engineer of the Canadian National at London, Ont., has been appointed division engineer of the Toronto terminals at Toronto, Ont., succeeding **J. W. Demcoe**, whose photograph and a biographical account of whose career appears elsewhere in these columns.

**J. Cherrington** has been appointed division engineer on the Canadian Pacific, at Penticton, B. C., succeeding **W. G. Dyer**, in connection with whose promotion to engineer of track of the system, at Montreal, Que., a photograph of Mr. Dyer and a



biographical account of his career appeared in the January 26 issue of *Railway Age*.

## MECHANICAL

**G. S. Glaiber** has been appointed assistant general supervisor car electrical equipment of the New York Central, with headquarters at New York.

**L. A. McAllister**, formerly mechanical inspector on the Chicago, Milwaukee, St. Paul & Pacific, at Milwaukee, Wis., has been appointed mechanical engineer of the Alton, with headquarters at Chicago, succeeding **K. L. Selby**, who has resigned.

**F. J. Topping**, master mechanic for the Chesapeake & Ohio at Columbus, Ohio, has been transferred to Huntington, W. Va., succeeding **R. K. Flanagan**, deceased. **J. E. McLeod**, master mechanic at Peru, Ind., has been transferred to succeed Mr. Topping on the Hocking division at Columbus, Ohio.

**William Forest Freutel**, whose appointment as special engineer of the Chesapeake & Ohio, with headquarters at Richmond, Va., was announced in the January 19 issue of *Railway Age*, was born on April 15, 1905, at Huntington, W. Va., and was graduated from West Virginia University in 1917. He entered railroading in March, 1917, as an electrician for the Chesapeake & Ohio. In 1921, he was advanced to foreman, electrical department, at the Huntington shops, then in 1924, to supervisor, train lighting. Mr. Freutel became general electrical inspector in 1929, and was promoted to assistant electrical engineer in 1942, which position he maintained until his current advancement became effective on January 1.

**Frank A. Rogers**, electrical supervisor of the New York, New Haven & Hartford, has been appointed assistant electrical engineer at New Haven, Conn., succeeding **George T. Johnson**, whose retirement was announced in the *Railway Age* of February 16.

Mr. Johnson, who was born on September 11, 1875, at New Haven, was graduated from Sheffield Scientific School, Yale University, in 1896. He entered railway service in 1904 as foreman electrician with the New Haven, becoming general foreman electrician, Western district, in 1907. Appointed signal inspector in 1912, he was advanced to electrical inspector in 1915, then to assistant engineer in 1916. In 1919 he was promoted to electrical supervisor, and in 1923, became assistant engineer, electrical engineering department. Mr. Johnson had been serving as assistant electrical engineer of the New Haven since 1925.

**G. A. Marriott**, whose retirement as special engineer of the Chesapeake & Ohio at Richmond, Va., was announced in the January 19 issue of *Railway Age*, was born on January 11, 1880, at Richmond, Ohio. He entered railroading in April, 1901, as a machinist's apprentice for the Chesapeake & Ohio at Huntington, W. Va., and Clifton Forge, Va., becoming machinist at Clifton Forge in 1905. He was advanced to draftsman and inspector at Richmond in

March, 1912, then draftsman there in December, 1912. In May, 1913, he was named locomotive inspector, in September of the same year, equipment inspector, and in June, 1916, valuation inspector. Mr. Marriott was promoted to corporate master mechanic in 1918, and in 1924 to office engineer in the mechanical department at Richmond, transferring to Huntington in 1930. He returned to Richmond in May 1940 as special engineer. His retirement from this position became effective December 31, 1945.

**James H. Wilson**, assistant chief mechanical officer of the Norfolk Southern at Norfolk, Va., has been appointed chief mechanical officer there. Mr. Wilson was born at Valdosta, Ga., and entered railroading at Tallahassee, Fla., in 1904 as a machinist apprentice for the Seaboard Air Line. He subsequently served the Atlantic Coast Line in the mechanical and electrical departments from 1909 to 1917, when he joined the Norfolk Southern as chief electrician. In March, 1934, he was



James H. Wilson

advanced to chief mechanical inspector and assistant superintendent motive power. He was promoted to assistant chief mechanical officer in 1937, which post has been abolished since Mr. Wilson became chief mechanical officer on January 25.

## SPECIAL

**W. H. Roberts**, whose promotion to superintendent of safety of the Chicago & North Western, with headquarters at Chicago, was reported in the *Railway Age* of February 16, was born at Chicago on June 5, 1894. He entered railroad service as office and messenger boy on the North Western, serving successively as clerk, stenographer, and secretary in the office of the assistant general manager and vice-president of operation and maintenance until 1917, when he entered the armed forces. He returned to the Northwestern in 1919, and became assistant chief clerk to the vice-president of operation and maintenance in 1920. In 1925 Mr. Roberts was promoted to chief clerk to the executive vice-president, and in 1926 he was appointed supervisor of the intensive loading bureau. He was appointed chief clerk to the general superintendent in 1927, and one year later he became chief clerk to the assist-

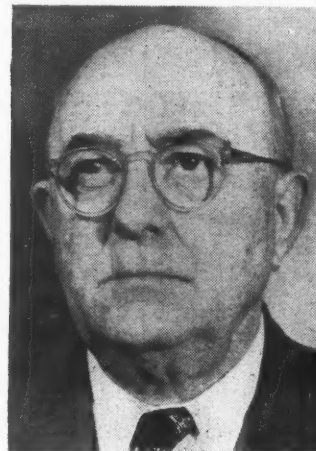
ant general manager. In 1943 he was appointed chief clerk in the office of the chief



W. H. Roberts

operating officer, in which capacity he served until he entered the armed forces later in the same year.

**T. W. Parsons**, whose appointment as chief of safety and operating rules of the Seaboard Air Line, with headquarters at Jacksonville, Fla., was announced in the February 2 issue of *Railway Age*, was born in Anderson, S. C., on May 4, 1882. He entered railroad service in 1899 in South Carolina, progressing from student telegrapher to agent-operator. Joining the Seaboard in 1903, he advanced to superintendent by 1916, when he went with the Charlotte Harbor & Northern (now part of S. A. L.) as vice-president and general manager. He returned to the Seaboard in 1926 as general superintendent at Jacksonville, Fla. Mr. Parsons advanced to as-



T. W. Parsons

sistant general manager there in 1942, maintaining this post until January 10, when it was abolished and he became chief of safety and operating rules.

## OBITUARY

**W. H. Larsen**, general agent of the Kansas City Southern at Texarkana, Tex., died at his home there on February 14.

**John E. O'Connor**, former vice-president of the Chicago, West Pullman & Southern, who retired in 1939, died on February 9, at his home in Chicago.

## REVENUES AND EXPENSES OF RAILWAYS

MONTH OF DECEMBER AND TWELVE MONTHS OF CALENDAR YEAR 1945

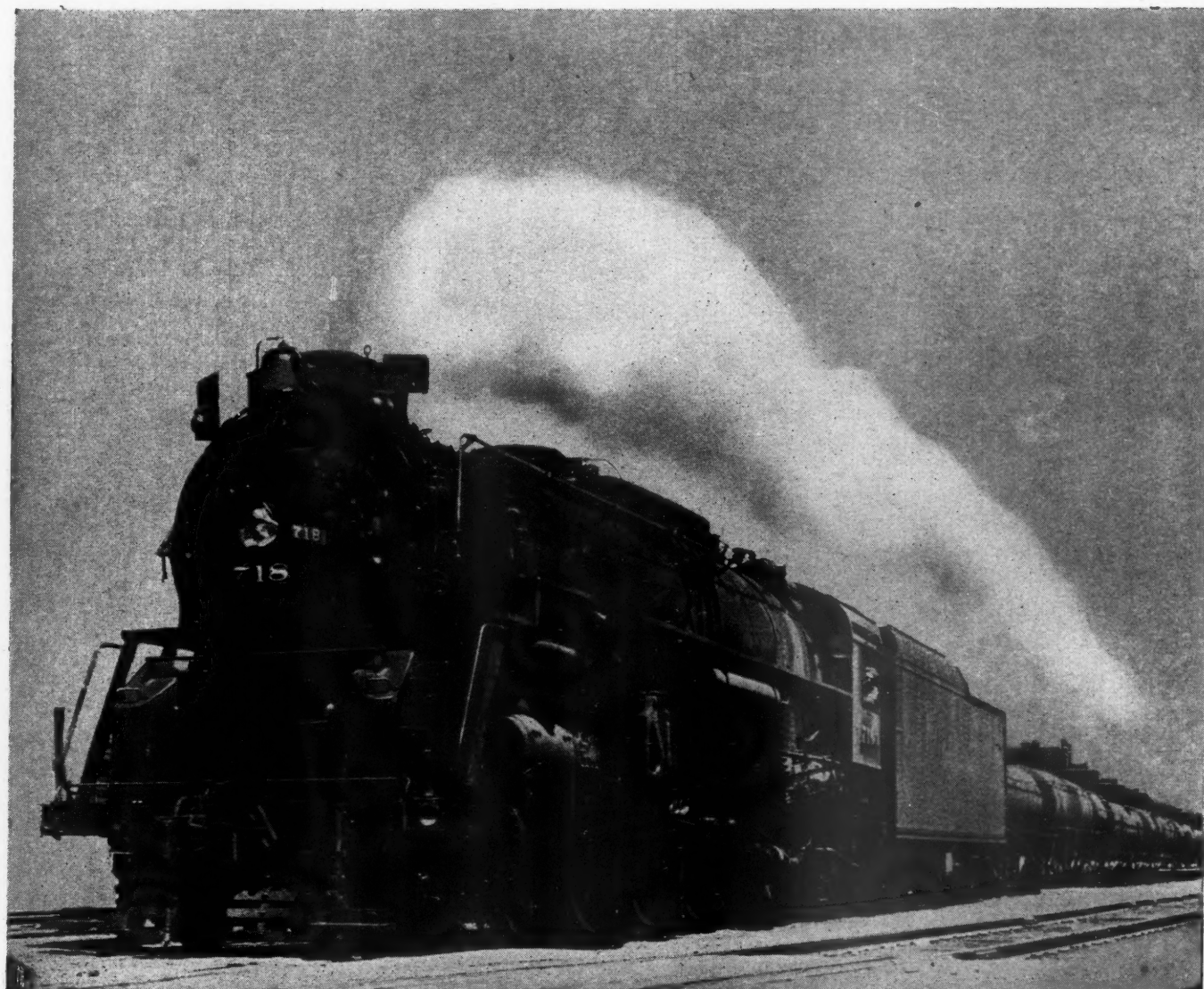
Name of road	Av. mileage operated during period	Operating revenues				Operating expenses				Operating ratio	Net from railway operation	Net railway operating income	
		Freight	Passenger (inc. misc.)	Total	Maintenance of way and structures	Equipment	Traffic	Transportation	Total			Railway tax accruals	1945
Akron, Canton & Youngstown	Dec. 171	2,994,880	\$162	\$311,532	\$69,083	\$33,849	\$25,829	\$102,565	\$269,974	86.7	\$41,558	\$16,474	\$41,749
Alton	Dec. 171	4,068,409	2,022	4,286,005	934,994	452,532	452,532	1,369,148	381,422	75.3	1,058,148	381,422	443,054
Alton	Dec. 959	793,861	922,562	2,090,363	626,146	3,252,360	89,106	1,583,212	2,713,324	273.0	3,622,961	—	959,117
Alton	Dec. 959	22,479,689	8,829,547	35,512,783	8,847,176	8,847,176	882,042	13,011,900	29,794,490	83.9	5,718,293	672,876	2,863,814
Atchison, Topeka & Santa Fe System	Dec. 13,108	20,602,059	11,233,986	35,285,021	10,362,405	7,435,505	859,356	14,063,507	33,620,817	95.3	1,664,204	*649,484	2,184,475
Atlanta & West Point	Dec. 13,114	380,294,125	112,832,155	528,703,149	97,032,423	139,851,598	7,889,198	151,261,883	404,459,607	76.5	124,243,542	81,612,242	37,084,177
Atlanta & West Point	Dec. 93	165,165	147,837	339,473	46,455	45,010	10,846	163,064	286,835	84.5	52,628	*68,528	35,517
Atlanta & West Point	Dec. 93	2,934,555	1,698,149	5,122,012	565,970	1,082,830	130,527	1,947,051	3,960,712	77.3	1,161,300	507,340	323,742
Western of Alabama	Dec. 133	167,397	152,424	335,930	62,623	1,876	10,520	147,982	242,551	72.2	93,379	99,550	48,235
Atlanta, Birmingham & Coast	Dec. 639	2,909,149	1,765,521	5,069,571	710,427	1,285,143	129,276	1,733,410	4,075,822	80.4	993,749	639,487	382,321
Atlanta, Birmingham & Coast	Dec. 639	41,177	136,454	579,469	124,315	119,980	31,803	391,138	693,862	119.7	114,393	38,837	18,304
Atlanta, Birmingham & Coast	Dec. 639	6,888,698	683,125	7,964,711	1,501,111	1,384,423	366,097	3,521,227	7,067,423	88.7	897,288	408,919	46,540
Atlantic Coast Line	Dec. 4,930	6,345,500	3,304,203	10,656,480	3,174,529	18,071,097	209,835	4,159,825	26,131,343	245.2	15,474,863	*14,350,000	1,362,626
Charleston & Western Carolina	Dec. 4,934	88,430,849	40,583,569	138,696,421	25,839,799	43,505,649	2,413,800	46,385,124	123,207,152	88.8	15,489,469	6,400,000	5,447,039
Charleston & Western Carolina	Dec. 343	2,044,556	19,140	2,063,696	47,490	77,721	1,252,526	1,514,390	3,292,627	31.7	17,904	*235,000	256,259
Charleston & Western Carolina	Dec. 343	3,706,720	217,168	4,031,070	761,393	806,513	128,526	1,514,390	3,292,627	31.7	736,243	140,000	57,279
Baltimore & Ohio	Dec. 6,139	19,302,993	4,468,537	25,367,152	5,316,365	23,948,543	581,517	11,092,049	42,212,789	16.1	16,845,637	*14,585,800	2,800,959
Baltimore & Ohio	Dec. 6,131	293,496,099	48,215,829	361,373,218	52,988,212	94,383,142	6,499,302	129,067,475	296,661,546	8.8	64,711,672	19,683,602	37,043,094
Baltimore & Ohio	Dec. 29	100,845	121,807	231,185	145,380	509,546	1,467	152,458	838,713	362.8	167,458	206,047	390,421
Baltimore & Ohio	Dec. 29	3,150,366	1,679,788	4,976,686	743,808	1,029,147	16,623	1,552,876	3,948,400	79.3	1,028,286	441,323	315,001
Bangor & Aroostook	Dec. 602	903,793	74,002	1,008,329	169,150	706,093	8,660	368,590	1,293,762	128.3	285,433	*362,643	68,588
Bangor & Aroostook	Dec. 602	9,184,049	930,130	10,512,299	1,964,876	2,312,054	77,640	2,998,089	7,771,867	73.9	2,740,432	1,628,233	1,232,913
Bangor & Aroostook	Dec. 602	7,607,511	780,384	8,387,895	3,645,383	6,450,383	14,111	306,380	7,152,957	916.6	3,372,573	4,320,485	1,763,897
Bangor & Aroostook	Dec. 214	17,481,536	26,967	17,669,430	2,001,250	13,930,034	163,903	4,006,896	20,602,205	116.6	2,932,775	*2,115,759	1,803,270
Boston & Maine	Dec. 1,764	4,025,199	1,646,143	6,261,314	1,428,125	7,246,247	86,965	2,696,245	11,711,583	187.1	5,450,269	*2,264,439	3,432,938
Boston & Maine	Dec. 1,764	55,332,307	19,260,771	82,252,949	14,663,708	20,668,847	1,054,290	31,011,479	70,374,765	85.6	11,858,184	5,039,033	3,560,677
Burlington, Rock Island	Dec. 228	202,667	72,326	235,041	3,849	3,604	3,604	100,228	184,509	62.5	110,532	9,450	53,889
Burlington, Rock Island	Dec. 228	2,174,041	870,751	3,270,856	406,625	43,933	43,933	1,145,011	2,151,275	63.8	1,119,561	105,613	502,522
Cambria & Indiana	Dec. 35	123,962	.....	124,026	18,291	55,563	986	28,709	115,034	92.75	8,992	55,654	50,824
Canadian Pacific Lines in Maine	Dec. 35	1,541,099	.....	1,542,089	153,214	570,494	7,470	223,364	1,042,598	67.60	499,491	1,001,548	591,059
Canadian Pacific Lines in Maine	Dec. 234	494,096	74,984	603,729	93,276	7,388	7,388	228,272	425,436	70.5	178,283	26,222	72,182
Canadian Pacific Lines in Maine	Dec. 234	5,046,464	1,232,007	6,736,647	1,028,950	939,078	81,773	2,182,733	4,382,766	65.1	2,353,881	269,731	1,128,494
Canadian Pacific Lines in Vermont	Dec. 90	88,476	14,255	113,908	29,596	30,308	2,671	114,903	183,587	161.2	69,679	10,976	117,181
Central of Georgia	Dec. 1,815	1,900,777	589,705	2,837,010	437,356	7,400,153	78,527	1,242,858	9,308,436	325.8	6,451,426	*5,409,255	1,001,445
Central of Georgia	Dec. 1,815	26,150,430	8,237,181	38,233,680	5,563,822	13,845,155	881,214	15,032,827	37,087,032	97.0	1,166,648	*2,923,638	94,364
Central of New Jersey	Dec. 649	2,884,916	583,984	3,696,827	2,091,603	3,235,985	57,222	1,898,587	7,532,191	203.7	3,885,364	*76,153	3,917,022
Central of New Jersey	Dec. 654	44,801,122	7,093,139	55,546,969	7,803,147	12,773,808	710,019	22,994,808	46,449,106	83.6	9,097,873	6,307,873	145,349
Central of New Jersey	Dec. 422	545,554	76,415	682,442	109,169	122,322	4,781	361,786	623,807	91.4	58,635	35,111	33,649
Central of New Jersey	Dec. 422	6,607,638	939,415	8,241,388	1,249,290	1,454,093	112,887	3,971,310	7,120,549	86.4	1,120,839	395,853	49,378
Chesapeake & Ohio	Dec. 3,084	12,625,183	2,626,405	15,819,889	3,790,551	2,875,045	309,279	5,528,594	13,230,214	83.6	2,589,675	*60,827	3,146,180
Chesapeake & Ohio	Dec. 3,079	172,736,161	22,891,429	203,332,147	35,112,100	78,700,290	3,211,288	60,551,920	184,685,128	90.8	18,647,019	2,803,083	22,025,257
Chicago & Eastern Illinois	Dec. 910	1,340,152	524,893	2,104,340	336,546	290,815	66,378	1,113,451	1,932,749	91.8	1,171,591	*26,500	96,283
Chicago & Eastern Illinois	Dec. 912	20,329,105	6,567,314	29,666,438	4,105,886	6,009,342	839,125	11,203,135	23,444,349	79.0	6,222,043	1,717,000	2,463,121
Chicago & Illinois Midland	Dec. 131	490,306	1,413	533,006	171,341	144,276	24,865	174,461	543,089	101.9	10,083	*38,271	31,251
Chicago & North Western	Dec. 8,065	7,789,161	3,900,315	13,295,487	1,727,887	7,422,521	250,016	5,436,907	15,365,386	115.6	2,069,899	*1,999,467	879,843
Chicago & North Western	Dec. 8,067	114,059,380	38,493,765	170,665,890	23,743,827	46,180,004	2,697,831	59,576,912	138,612,186	81.2	32,053,754	13,069,899	18,192,820
Chicago, Burlington & Quincy	Dec. 8,863	10,507,148	4,296,876	16,458,711	10,800,395	20,595,584	390,808	6,274,544	38,845,198	236.1	22,386,487	*29,720,546	6,947,622
Chicago, Burlington & Quincy	Dec. 8,965	183,286,915	38,193,572	242,542,798	47,843,082	51,952,635	3,615,688	63,650,499	174,150,911	71.8	68,391,877	30,248,889	34,447,289
Chicago Great Western	Dec. 1,500	1,771,911	297,281	2,322,789	73,944	1,021,050	66,642	1,132,244	2,277,085	97.9	1,138,094	33,467	211,471
Chicago Great Western	Dec. 1,500	24,023,437	2,884,812	29,151,460	4,224,953	4,773,794	799,601	11,432,611	22,127,298	75.2	7,288,162	*27,224,99	2,608,378
Chicago, Indianapolis & Louisville	Dec. 541	729,379	92,500	871,000	237,217	191,390	33,798	356,751	864,969	99.3	6,048	*100,449	38,295
Chicago, Indianapolis & Louisville	Dec. 541	10,025,580	804,919	11,556,500	1,538,391	2,193,222	403,064	3,948,649	8,550,501	74.0	3,005,999	618,348	1,716,939

\* Credit.

(Table continued on next left-hand page)

Railway Age—February 23, 1946





Nickel Plate 2-8-4 built by Lima

## *Today's Speed will be SLOW tomorrow!*

**A**MERICAN business calls continuously for faster and faster deliveries. To meet this insistent demand, the railroads require motive power capable of hauling heavier trains at higher sustained speeds.

Lima is meeting this need by building steam locomotives that move heavy freight traffic at passenger train speed, with maximum efficiency and economy.

LIMA LOCOMOTIVE WORKS



INCORPORATED, LIMA, OHIO

## REVENUES AND EXPENSES OF RAILWAYS

MONTH OF DECEMBER AND TWELVE MONTHS OF CALENDAR YEAR 1945—CONTINUED

Name of road	Av. mileage operated during period	Operating revenues			Operating expenses			Operating ratio	Net from operation		Net railway operating income	
		Freight	Passenger	Total	Way and structures	Maintenance of equipment	Traffic		Net from operation	Railway tax accruals	1945	1944
Chicago, Milwaukee, St. Paul & Pacific.....	Dec. 10,733	\$10,677,071	\$3,994,702	\$14,671,773	\$3,314,826	\$6,214,811	\$314,952	108.3	\$1,366,745	\$2,776,000	\$907,692	\$2,797,878
Chicago, Milwaukee, St. Paul & Pacific.....	12 mos. 10,727	168,950,558	37,107,494	206,058,052	44,931,431	11,029,360	3,592,877	81.6	42,097,519	12,067,000	26,582,330	32,709,519
Chicago, Rock Island & Pacific.....	Dec. 7,752	7,252,545	3,684,788	10,937,333	3,756,327	11,215,645	5,450,637	176.0	9,260,582	*7,301,563	2,461,225	549,259
Chicago, Rock Island & Pacific.....	12 mos. 7,751	135,047,197	42,450,954	177,498,151	30,293,556	36,533,699	4,167,520	70.9	55,962,109	27,043,267	22,195,944	26,079,690
Chicago, St. Paul, Minneapolis & Omaha.....	Dec. 1,617	1,542,886	390,913	1,933,799	380,691	615,938	44,298	102.2	47,634	71,624	200,587	151,321
Chicago, St. Paul, Minneapolis & Omaha.....	12 mos. 1,617	21,102,655	4,554,216	25,656,871	3,977,961	4,934,025	494,947	77.3	6,376,133	2,336,887	3,776,542	3,433,622
Clinchfield.....	Dec. 302	974,518	11,983	986,501	51,351	1,800,961	22,221	218.1	1,766,611	92,543	1,233,750	436,276
Clinchfield.....	12 mos. 302	12,954,616	130,654	13,085,270	1,142,112	3,966,648	269,135	66.4	4,439,760	1,446,252	3,356,981	6,094,811
Colorado & Southern.....	Dec. 748	560,183	394,696	954,879	446,530	257,586	19,451	109.7	103,676	57,795	194,121	32,482
Colorado & Southern.....	12 mos. 748	10,831,873	3,389,115	14,220,988	2,632,544	2,387,545	216,089	70.5	4,578,248	1,810,030	2,126,567	2,738,386
Fort Worth & Denver City.....	Dec. 804	574,777	414,523	989,300	337,139	1,441,939	28,675	205.3	1,161,652	31,890	1,222,369	178,885
Fort Worth & Denver City.....	12 mos. 804	9,718,200	4,937,268	14,655,468	3,846,319	3,595,465	328,137	78.9	3,424,318	1,963,514	955,461	2,974,141
Colorado & Wyoming.....	Dec. 42	81,909	.....	81,909	12,651	16,115	788	64.0	47,071	26,629	20,545	24,898
Colorado & Wyoming.....	12 mos. 42	935,383	.....	935,383	152,478	230,513	8,912	67.5	494,732	261,572	233,508	344,787
Columbus & Greenville.....	Dec. 168	96,000	115,945	211,945	31,507	22,116	5,370	117.7	129,486	1,579	10,815	45,906
Columbus & Greenville.....	12 mos. 168	1,433,822	107,596	1,541,418	389,099	249,090	56,884	88.3	192,983	173,251	33,008	60,943
Delaware & Hudson.....	Dec. 846	3,154,311	184,897	3,339,208	836,745	1,519,462	46,877	82.7	595,304	310,134	332,613	766,829
Delaware & Hudson.....	12 mos. 846	42,715,520	2,451,439	45,166,959	5,839,642	15,194,773	575,540	86.8	6,075,656	2,808,331	3,004,621	8,848,260
Delaware, Lackawanna & Western.....	Dec. 973	3,715,266	1,083,828	4,799,094	4,224,100	2,521,480	108,200	145.8	2,153,668	239,329	2,191,705	795,674
Delaware, Lackawanna & Western.....	12 mos. 973	54,267,882	11,061,211	65,329,093	9,391,991	16,198,200	1,359,392	84.0	11,569,379	8,053,304	2,347,901	6,420,112
Denver & Rio Grande Western.....	Dec. 2,386	3,436,869	1,347,317	4,784,186	287,323	1,421,710	112,983	79.7	1,032,962	1,410,647	460,554	2,117,571
Denver & Rio Grande Western.....	12 mos. 2,386	60,859,213	10,777,262	71,636,475	12,081,567	22,353,752	1,257,283	81.0	14,246,504	14,151,492	1,153,850	10,554,956
Denver & Salt Lake.....	Dec. 232	2,902,131	110,897	3,013,028	60,807	79,410	5,118	96.7	10,378	46,378	1,509	39,461
Denver & Salt Lake.....	12 mos. 232	32,920,437	1,108,897	34,029,334	646,080	677,436	41,246	78.4	744,058	376,516	917,934	874,664
Detroit & Mackinac.....	Dec. 230	85,438	6,169	91,607	15,044	13,753	647	69.2	30,743	4,322	19,880	3,555
Detroit & Mackinac.....	12 mos. 230	833,680	110,828	944,508	217,438	189,786	9,003	82.2	184,260	52,581	82,830	95,267
Detroit & Toledo Shore Line.....	Dec. 546	306,150	307,189	613,339	27,230	41,908	10,399	68.7	96,064	53,086	86,779	53,164
Detroit & Toledo Shore Line.....	12 mos. 546	3,973,376	3,991,774	7,965,150	466,675	330,708	120,532	56.7	1,729,362	482,800	565,927	693,529
Detroit, Toledo & Ironton.....	Dec. 464	639,411	1,661	641,072	89,323	403,748	17,846	110.3	71,764	*65,219	39,385	248,017
Detroit, Toledo & Ironton.....	12 mos. 464	8,014,823	17,851	8,032,674	1,148,680	1,826,059	187,161	70.6	2,485,530	1,098,798	1,305,947	2,152,105
Duluth, Missabe & Iron Range.....	Dec. 546	228,706	6,671	235,377	270,463	5,060,641	5,768	276.3	1,137,554	*1,137,554	3,991,599	2,358,226
Duluth, Missabe & Iron Range.....	12 mos. 546	33,847,954	64,820	33,912,774	5,473,317	11,375,787	60,908	66.3	13,221,841	*1,817,237	15,200,192	9,335,449
Duluth, Winnipeg & Pacific.....	Dec. 175	228,151	1,225	229,376	34,573	28,272	3,601	71.2	69,242	18,443	26,922	1,484
Duluth, Winnipeg & Pacific.....	12 mos. 175	2,637,151	27,425	2,664,576	597,163	368,171	30,079	72.4	562,432	217,680	41,787	180,909
Elgin, Joliet & Eastern.....	Dec. 392	1,928,590	10	1,928,600	2,246,239	354,843	20,450	362.0	5,884,160	*4,533,049	1,296,812	3,124,532
Elgin, Joliet & Eastern.....	12 mos. 392	26,732,371	384	26,732,755	3,152,189	14,419,406	209,488	96.6	1,052,496	*1,252,286	1,296,812	3,124,532
Erie.....	Dec. 2,242	7,709,679	1,228,075	8,937,754	1,708,717	2,341,294	257,663	110.8	1,036,246	*1,559,165	327,972	1,528,384
Erie.....	12 mos. 2,242	117,002,946	13,269,738	130,272,684	17,594,230	32,293,638	2,876,830	85.2	20,630,296	*415,743	13,923,268	16,324,332
Florida East Coast.....	Dec. 682	1,187,080	1,046,303	2,233,383	344,549	1,470,530	49,237	113.2	327,639	*387,006	32,157	376,457
Florida East Coast.....	12 mos. 682	14,279,504	12,719,789	26,999,293	3,963,264	5,206,604	679,932	69.6	8,996,070	3,597,553	4,401,728	5,951,599
Georgia Railroad.....	Dec. 328	475,074	98,273	573,347	220,939	817,463	22,946	233.0	794,353	36,430	802,175	102,938
Georgia Railroad.....	12 mos. 328	7,088,229	1,736,112	8,824,341	1,266,727	2,356,030	3,817,353	85.6	1,340,948	400,894	956,779	2,879,839
Georgia & Florida.....	Dec. 408	151,023	5,395	156,418	162,925	47,488	11,440	99.5	15,956	25,924	6,049	113,059
Georgia & Florida.....	12 mos. 408	2,032,633	59,717	2,092,350	567,664	316,753	129,884	89.1	235,223	135,041	30,834	113,059
Grand Trunk Western.....	Dec. 1,026	1,764,612	447,918	2,212,530	499,745	597,744	61,007	105.1	123,084	*31,752	4,216,139	452,731
Grand Trunk Western.....	12 mos. 1,026	29,285,612	4,598,918	33,884,530	6,614,084	6,338,034	474,839	81.4	6,739,718	2,090,525	4,216,139	5,383,576
Canadian National Lines in New England.....	Dec. 172	147,332	13,444	160,776	56,816	34,198	2,250	103.6	6,751	24,839	58,337	49,450
Canadian National Lines in New England.....	12 mos. 172	1,847,332	147,244	1,994,576	674,056	334,406	27,235	107.8	177,323	257,918	894,335	1,072,413
Great Northern.....	Dec. 8,332	8,802,569	2,354,296	11,156,865	5,070,774	5,711,964	272,633	150.6	6,110,736	*5,416,046	736,049	4,232,345
Great Northern.....	12 mos. 8,332	164,379,347	20,887,002	185,266,349	39,444,504	50,547,917	2,878,029	79.7	40,610,072	11,347,504	28,379,435	32,968,620
Green Bay & Western.....	Dec. 233	198,205	432	198,637	31,604	202,765	8,805	74.12	52,475	30,133	32,014	31,117
Green Bay & Western.....	12 mos. 233	2,610,762	6,246	2,617,008	718,909	279,854	103,186	78.16	587,432	392,967	126,040	175,111
Gulf & Ship Island.....	Dec. 233	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gulf & Ship Island.....	12 mos. 233	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

\* Credit.

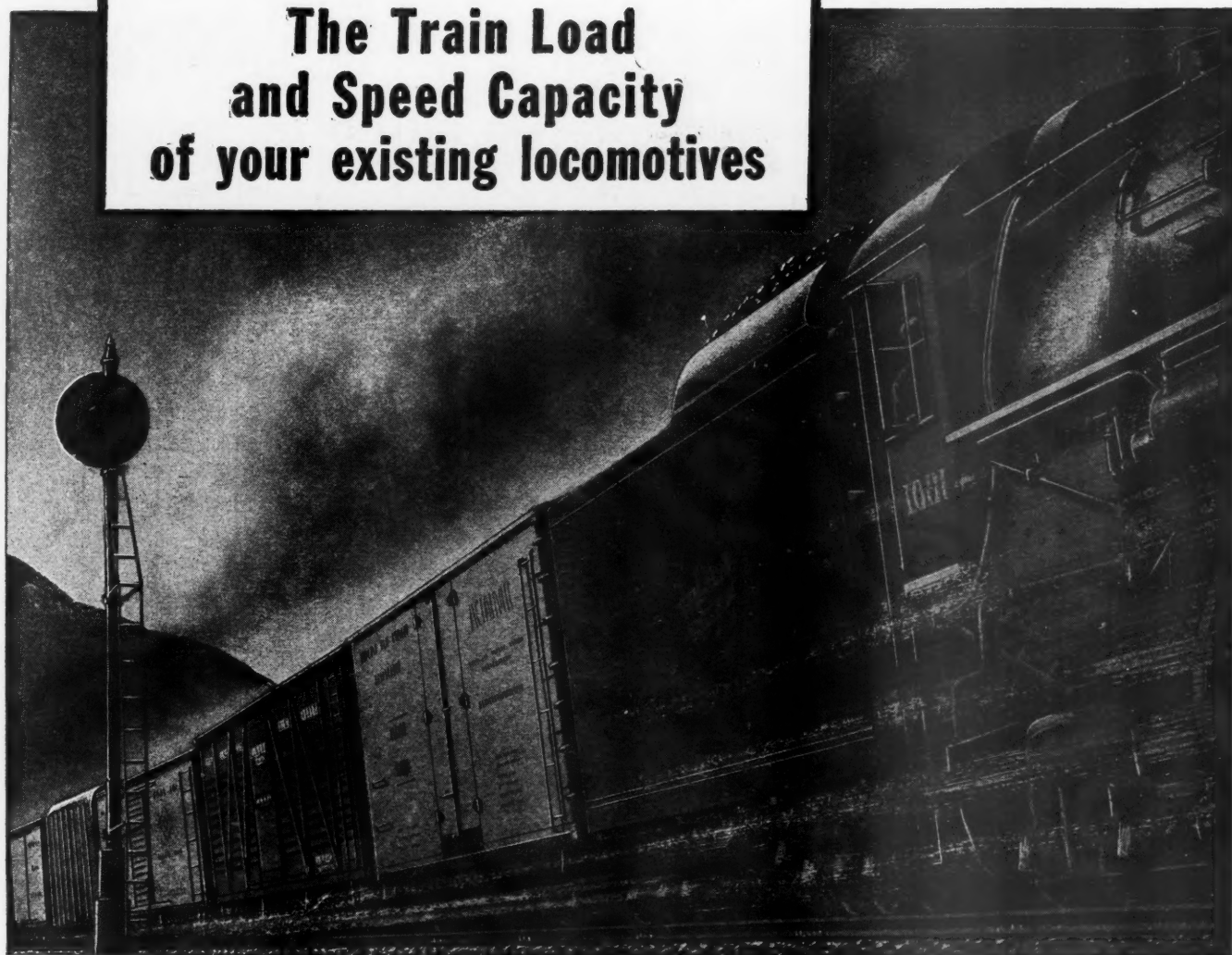
(Table continued on next left-hand page)

Railway Age—February 23, 1946



# *Step up...*

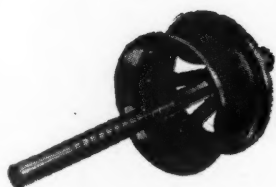
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AUTOMATIC FIRE DOORS • DRIVING BOX LUBRICATORS • STEAM GRATE SHAKERS • FLEXIBLE JOINTS • CAR CONNECTION**

February 23, 1946

30

# REVENUES AND EXPENSES OF RAILWAYS

MONTH OF DECEMBER AND TWELVE MONTHS OF CALENDAR YEAR 1945—CONTINUED

Name of road	Av. mileage operated during period	Operating revenues				Operating expenses				Operating ratio	Net from operation	Net railway operating income	
		Freight	Passenger	Inc. misc.	Total	Way and structures	Maintenance of equipment	Traffic	Trans- portation	Total			
Gulf, Mobile & Ohio	Dec. 1945	\$2,404,745	\$244,301	\$2,741,688	\$5,450,570	\$1,917,106	\$2,151,327	\$132,889	\$1,099,880	\$5,450,570	198.8	\$2,708,882	\$18,639
	12 mos.	\$24,016,223	\$2,824,431	\$26,840,654	\$30,716,514	\$8,383,973	\$9,213,813	\$1,147,877	\$11,234,968	\$30,716,514	80.7	\$2,708,882	\$18,639
	Dec. 1944	\$2,404,745	\$244,301	\$2,741,688	\$5,450,570	\$1,917,106	\$2,151,327	\$132,889	\$1,099,880	\$5,450,570	198.8	\$2,708,882	\$18,639
Illinois Central	Dec. 1945	\$1,007,015	\$161,063	\$1,168,078	\$2,269,083	\$356,966	\$33,026,625	\$2,677,670	\$64,138,398	\$151,018,818	154.2	\$5,566,070	\$20,331,845
	12 mos.	\$10,070,150	\$1,610,630	\$11,680,780	\$22,690,830	\$356,966	\$330,266,250	\$26,776,700	\$641,383,980	\$1,510,188,818	72.4	\$55,660,700	\$203,318,450
	Dec. 1944	\$1,007,015	\$161,063	\$1,168,078	\$2,269,083	\$356,966	\$33,026,625	\$2,677,670	\$64,138,398	\$151,018,818	154.2	\$5,566,070	\$20,331,845
Yazoo & Mississippi Valley	Dec. 1945	\$1,507,731	\$241,401	\$1,749,132	\$3,498,533	\$1,555,291	\$254,222	\$36,207	\$47,677	\$2,372,299	133.0	\$89,011	\$725,178
	12 mos.	\$15,077,310	\$2,414,010	\$17,491,320	\$34,985,330	\$15,552,910	\$2,542,220	\$362,070	\$476,770	\$23,722,990	72.6	\$890,110	\$7,251,780
	Dec. 1944	\$1,507,731	\$241,401	\$1,749,132	\$3,498,533	\$1,555,291	\$254,222	\$36,207	\$47,677	\$2,372,299	133.0	\$89,011	\$725,178
Illinois Central System	Dec. 1945	\$26,032,806	\$3,629,337	\$29,662,143	\$33,291,480	\$6,906,904	\$8,096,904	\$250,020	\$6,410,064	\$20,162,851	134.1	\$122,597	\$4,064,484
	12 mos.	\$260,328,060	\$36,293,370	\$296,621,430	\$332,914,800	\$69,069,040	\$80,969,040	\$2,500,200	\$64,100,640	\$201,628,510	72.4	\$1,225,970	\$40,644,840
	Dec. 1944	\$26,032,806	\$3,629,337	\$29,662,143	\$33,291,480	\$6,906,904	\$8,096,904	\$250,020	\$6,410,064	\$20,162,851	134.1	\$122,597	\$4,064,484
Illinois Terminal	Dec. 1945	\$483,786	\$165,795	\$649,581	\$1,215,156	\$107,542	\$108,482	\$19,870	\$27,838	\$546,331	76.65	\$166,430	\$978,607
	12 mos.	\$4,837,860	\$1,657,950	\$6,495,810	\$12,151,560	\$1,075,420	\$1,084,820	\$198,700	\$278,380	\$5,463,310	69.18	\$1,664,300	\$9,786,070
	Dec. 1944	\$483,786	\$165,795	\$649,581	\$1,215,156	\$107,542	\$108,482	\$19,870	\$27,838	\$546,331	76.65	\$166,430	\$978,607
Kansas City Southern	Dec. 1945	\$1,832,025	\$246,565	\$2,078,590	\$4,156,655	\$380,136	\$478,228	\$66,206	\$926,805	\$2,019,659	90.6	\$210,466	\$1,167,886
	12 mos.	\$18,320,250	\$2,465,650	\$20,785,900	\$41,566,550	\$3,801,360	\$4,782,280	\$662,060	\$9,268,050	\$20,196,590	64.2	\$2,104,660	\$11,678,860
	Dec. 1944	\$1,832,025	\$246,565	\$2,078,590	\$4,156,655	\$380,136	\$478,228	\$66,206	\$926,805	\$2,019,659	90.6	\$210,466	\$1,167,886
Kansas, Oklahoma & Gulf	Dec. 1945	\$211,148	\$161,105	\$372,253	\$712,761	\$41,712	\$229,761	\$14,222	\$99,016	\$400,735	185.4	\$184,630	\$263,300
	12 mos.	\$2,111,480	\$1,611,050	\$3,722,530	\$7,127,610	\$417,120	\$2,297,610	\$142,220	\$990,160	\$4,007,350	56.5	\$1,846,300	\$2,633,000
	Dec. 1944	\$211,148	\$161,105	\$372,253	\$712,761	\$41,712	\$229,761	\$14,222	\$99,016	\$400,735	185.4	\$184,630	\$263,300
Lake Superior & Ishpeming	Dec. 1945	\$4,200,296	\$22,213	\$4,222,509	\$8,444,722	\$37,391	\$386,623	\$8,387	\$641,180	\$1,588,907	53.7	\$1,345,527	\$759,667
	12 mos.	\$42,002,960	\$222,130	\$42,225,090	\$84,447,220	\$373,910	\$3,866,230	\$83,870	\$6,411,800	\$15,889,070	53.7	\$1,345,527	\$7,596,667
	Dec. 1944	\$4,200,296	\$22,213	\$4,222,509	\$8,444,722	\$37,391	\$386,623	\$8,387	\$641,180	\$1,588,907	53.7	\$1,345,527	\$759,667
Lehigh & Hudson River	Dec. 1945	\$179,448	\$98	\$179,536	\$359,084	\$66,890	\$449,427	\$5,381	\$73,119	\$602,168	334.6	\$422,210	\$348,035
	12 mos.	\$1,794,480	\$980	\$1,795,360	\$3,590,840	\$668,900	\$4,494,270	\$53,810	\$731,190	\$6,021,680	86.3	\$422,210	\$348,035
	Dec. 1944	\$179,448	\$98	\$179,536	\$359,084	\$66,890	\$449,427	\$5,381	\$73,119	\$602,168	334.6	\$422,210	\$348,035
Lehigh Valley	Dec. 1945	\$294,355	\$988	\$295,343	\$595,733	\$53,882	\$901,640	\$6,375	\$95,506	\$2,545,896	86.3	\$405,702	\$2,100
	12 mos.	\$2,943,550	\$9,880	\$2,953,430	\$5,953,310	\$538,820	\$9,016,400	\$63,750	\$955,060	\$25,458,960	307.3	\$405,702	\$2,100
	Dec. 1944	\$294,355	\$988	\$295,343	\$595,733	\$53,882	\$901,640	\$6,375	\$95,506	\$2,545,896	86.3	\$405,702	\$2,100
Louisiana & Arkansas	Dec. 1945	\$1,338,506	\$249,616	\$1,588,122	\$3,177,738	\$1,395,325	\$2,385,407	\$423,531	\$4,608,530	\$12,016,229	63.5	\$6,913,715	\$3,363,214
	12 mos.	\$13,385,060	\$2,496,160	\$15,881,220	\$31,777,380	\$13,953,250	\$23,854,070	\$4,235,310	\$46,085,300	\$120,162,290	187.3	\$69,137,150	\$33,632,140
	Dec. 1944	\$1,338,506	\$249,616	\$1,588,122	\$3,177,738	\$1,395,325	\$2,385,407	\$423,531	\$4,608,530	\$12,016,229	63.5	\$6,913,715	\$3,363,214
Louisville & Nashville	Dec. 1945	\$18,610,418	\$256,929	\$18,867,347	\$39,734,714	\$4,987,383	\$11,537,010	\$246,028	\$5,742,474	\$21,580,257	155.3	\$7,684,524	\$8,369,263
	12 mos.	\$186,104,180	\$2,569,290	\$188,673,470	\$397,347,140	\$49,873,830	\$115,370,100	\$2,460,280	\$57,424,740	\$215,802,570	74.5	\$76,845,240	\$83,692,263
	Dec. 1944	\$18,610,418	\$256,929	\$18,867,347	\$39,734,714	\$4,987,383	\$11,537,010	\$246,028	\$5,742,474	\$21,580,257	155.3	\$7,684,524	\$8,369,263
Maine Central	Dec. 1945	\$118,137	\$44	\$118,181	\$236,365	\$22,449	\$16,147	\$3,406	\$51,017	\$99,553	82.0	\$21,761	\$13,604
	12 mos.	\$1,181,370	\$440	\$1,181,810	\$2,363,650	\$224,490	\$161,470	\$34,060	\$510,170	\$995,530	82.0	\$217,610	\$136,040
	Dec. 1944	\$118,137	\$44	\$118,181	\$236,365	\$22,449	\$16,147	\$3,406	\$51,017	\$99,553	82.0	\$21,761	\$13,604
Midland Valley	Dec. 1945	\$1,664,957	\$1,080	\$1,666,037	\$3,332,017	\$354,909	\$16,144	\$88,379	\$410,576	\$1,520,591	69.9	\$384,362	\$147,056
	12 mos.	\$16,649,570	\$10,800	\$16,660,370	\$33,320,170	\$3,549,090	\$161,440	\$883,790	\$4,105,760	\$15,205,910	133.8	\$384,362	\$147,056
	Dec. 1944	\$1,664,957	\$1,080	\$1,666,037	\$3,332,017	\$354,909	\$16,144	\$88,379	\$410,576	\$1,520,591	69.9	\$384,362	\$147,056
Minneapolis & St. Louis	Dec. 1945	\$1,490,723	\$485,151	\$1,975,874	\$3,951,025	\$277,631	\$4,648,990	\$836,143	\$4,768,672	\$13,746,524	88.3	\$1,866,537	\$1,075,540
	12 mos.	\$14,907,230	\$4,851,510	\$19,758,740	\$39,510,250	\$2,776,310	\$46,489,900	\$8,361,430	\$47,686,720	\$137,465,240	88.3	\$1,866,537	\$1,075,540
	Dec. 1944	\$1,490,723	\$485,151	\$1,975,874	\$3,951,025	\$277,631	\$4,648,990	\$836,143	\$4,768,672	\$13,746,524	88.3	\$1,866,537	\$1,075,540
Minneapolis, St. Paul & Sault Ste. Marie	Dec. 1945	\$1,779,282	\$195,347	\$1,974,629	\$3,949,256	\$319,704	\$397,812	\$42,419	\$1,097,043	\$1,929,754	90.3	\$206,704	\$165,439
	12 mos.	\$17,792,820	\$1,953,470	\$19,746,290	\$39,492,560	\$3,197,040	\$3,978,120	\$424,190	\$10,970,430	\$19,297,540	90.3	\$206,704	\$165,439
	Dec. 1944	\$1,779,282	\$195,347	\$1,974,629	\$3,949,256	\$319,704	\$397,812	\$42,419	\$1,097,043	\$1,929,754	90.3	\$206,704	\$165,439
Duluth, South Shore & Atlantic	Dec. 1945	\$348,637	\$262,137	\$610,774	\$1,170,911	\$841,701	\$699,003	\$137,479	\$1,620,551	\$3,395,389	83.6	\$666,580	\$217,717
	12 mos.	\$3,486,370	\$2,621,370	\$6,107,740	\$11,709,110	\$8,417,010	\$6,990,030	\$1,374,790	\$16,205,510	\$33,953,890	83.6	\$666,580	\$217,717
	Dec. 1944	\$348,637	\$262,137	\$610,774	\$1,170,911	\$841,701	\$699,003	\$137,479	\$1,620,551	\$3,395,389	83.6	\$666,580	\$217,717
Spokane International	Dec. 1945	\$93,728	\$2,830	\$96,558	\$199,388	\$48,757	\$301,628	\$90,825	\$1,017,357	\$138,444	102.0	\$4,165	\$35,613
	12 mos.	\$937,280	\$28,300	\$965,580	\$1,993,880	\$487,570	\$3,016,280	\$908,250	\$10,173,570	\$1,384,440	102.0	\$41,650	\$356,130
	Dec. 1944	\$93,728	\$2,830	\$96,558	\$199,388	\$48,757	\$301,628	\$90,825	\$1,017,357	\$138,444	102.0	\$4,165	\$35,613
Mississippi Central	Dec. 1945	\$1,753,799	\$107,129	\$1,860,928	\$3,768,127	\$1,905,868	\$441,143	\$52,791	\$67,512	\$2,359,167	67.4	\$1,138,440	\$593,982
	12 mos.	\$17,537,990	\$1,071,290	\$18,609,280	\$37,681,270	\$19,058,680	\$4,411,430	\$527,910	\$675,120	\$23,591,670	67.4	\$1,138,440	\$593,982
	Dec. 1944	\$1,753,799	\$107,129	\$1,860,928	\$3,768,127	\$1,905,868	\$441,143	\$52,791	\$67,512	\$2,359,167	67.4	\$1,138,440	\$593,982
Missouri & Arkansas	Dec. 1945	\$130,692	\$2,727	\$133,419	\$266,146	\$35,914	\$711,176	\$31,818	\$68,528	\$138,444	97.9	\$3,040	\$6,302
	12 mos.	\$1,306,920	\$27,270	\$1,334,190	\$2,661,460	\$359,140	\$7,111,760	\$318,180	\$685,280	\$1,384,440	97.9	\$3,040	\$6,302
	Dec. 1944	\$130,692	\$2,727	\$133,419	\$266,146	\$35,914	\$711,176	\$31,818	\$68,528	\$138,444	97.9	\$3,040	\$6,302
Missouri-Illinois	Dec. 1945	\$2,035,203	\$27,655	\$2,062,858	\$4,130,513	\$245,533	\$240,588	\$108,737	\$493,598	\$1,367,138	71.7	\$538,130	\$158,076
	12 mos.	\$20,352,030	\$276,550	\$20,628,580	\$41,305,130	\$2,455,330	\$2,405,880	\$1,087,370	\$4,935,980	\$13,671,380	71.7	\$538,130	\$158,076
	Dec. 1944	\$2,035,203	\$27,655	\$2,062,858	\$4,130,513	\$245,533	\$240,588	\$108,737	\$493,598	\$1,367,138	71.7	\$538,130	\$158,076
Missouri-Kansas-Texas Lines	Dec. 1945	\$3,132,316	\$1,096,439	\$4,228,755	\$8,225,194	\$1,130,483	\$737,135	\$191,227	\$1,759,961	\$4,084,001	86.4	\$641,579	\$2,033,773
	12 mos.	\$31,323,160	\$10,964,390	\$42,287,550	\$82,251,940	\$11,304,830	\$7,371,350	\$1,912,270	\$17,599,960	\$40,840,010	86.4	\$6,415,790	\$20,337,730
	Dec. 1944	\$3,132,316	\$1,096,439	\$4,228,755	\$8,225,194	\$1,130,483	\$737,135	\$191,227	\$1,759,961	\$4,084,001	86.4	\$641,579	\$2,033,773
Missouri Pacific	Dec. 1945	\$167,193,989	\$34,086,678	\$201,280,667	\$235,367,645	\$30,744,186	\$42,789,651	\$3,735,289	\$66,580,637	\$150,384,152	69.0	\$67,654,383	\$35,563,494
	12 mos.	\$1,671,939,890	\$340,866,780	\$2,012,806,670	\$2,353,746,450	\$307,441,860	\$427,896,510	\$37,352,890	\$665,806,370	\$1,503,841,520			



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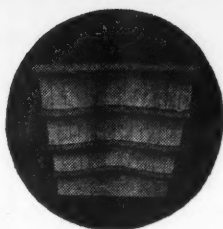
To secure maximum power from every ton of coal burned, a com-

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*Locomotive Combustion Specialists*

MONTHS OF DECEMBER AND TWELVE MONTHS OF CALENDAR YEAR 1945—CONTINUED

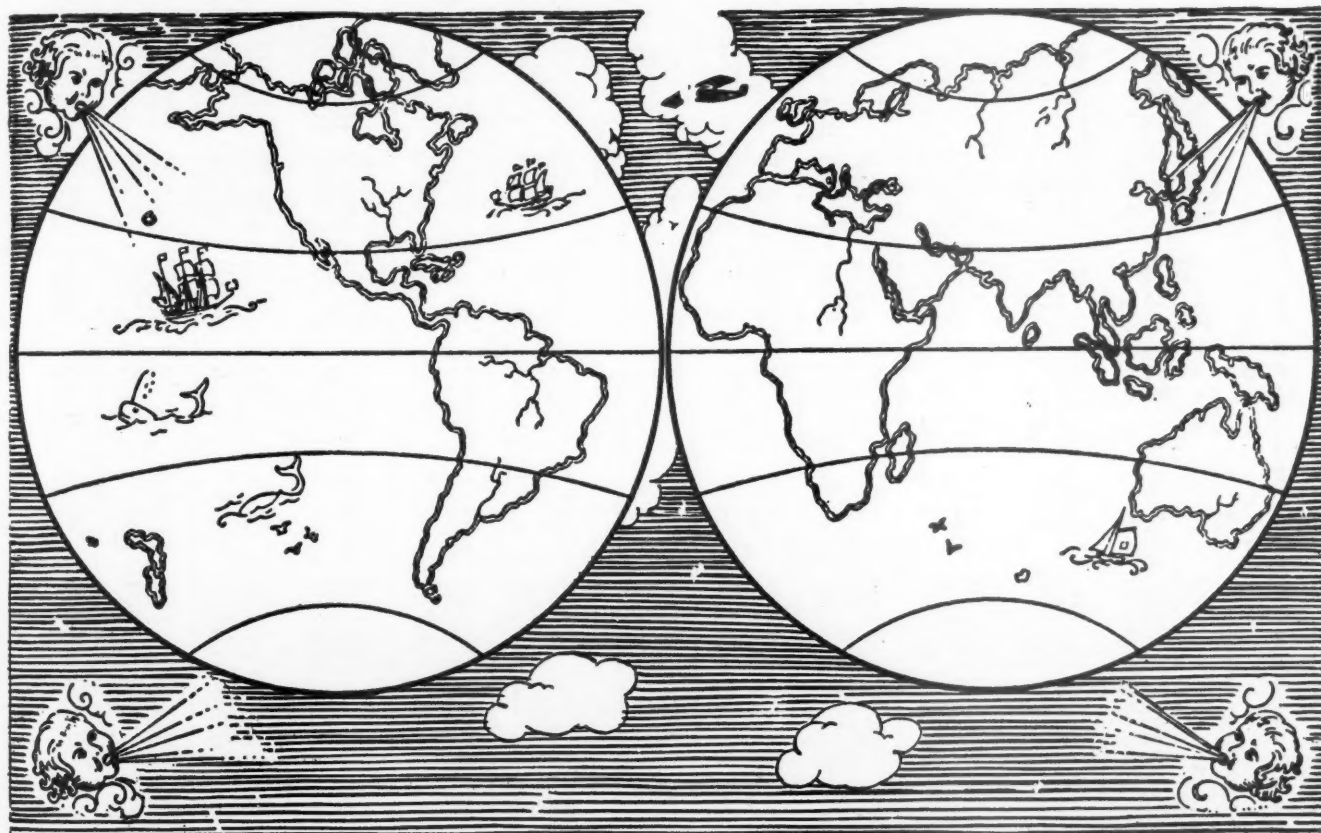
**• Credit**

Railway Age—February 23, 1946





## Resourcefulness in ENGINEERING



Locomotive superheaters were pioneered by this company and its associated world-wide companies.

When operating conditions progressively required more powerful locomotives, engineers of this company and its world-wide associated companies had the resourcefulness to keep abreast of these demands with improved designs—to meet the new operating conditions.

The resourcefulness of our engineers are ever focused on changing operating problems to the end that Elesco superheaters will continue to represent the best.

### THE SUPERHEATER COMPANY

Representative of AMERICAN THROTTLE COMPANY, INC.

60 East 42nd Street, NEW YORK

122 S. Michigan Ave., CHICAGO

Montreal, Canada, THE SUPERHEATER COMPANY, LTD.

Superheaters • Superheater Pyrometers • Exhaust Steam Injectors • Steam Dryers • Feedwater Heaters • American Throttles

## REVENUES AND EXPENSES OF RAILWAYS

MONTH OF DECEMBER AND TWELVE MONTHS OF CALENDAR YEAR 1945—CONTINUED

Name of road	Av. mileage operated during period	Operating revenues				Operating expenses				Operating ratio	Net from railway operation	Net railway operating income		
		Freight	Passenger	Total	(Inc. misc.)	Way and structures	Equip-ment	Traffic	Portation			Railway tax accruals	1945	1944
St. Louis Southwestern Lines	Dec. 12 mos.	1,607 \$3,255,618	\$503,195	\$3,912,467	\$733,744	\$1,110,199	\$1,110,199	\$139,168	\$1,145,804	83.3	\$3,257,948	\$1,092,756	\$613,975	\$955,609
Seaboard Air Line	Dec. 12 mos.	1,607 \$9,234,746	3,922,613	\$5,012,442	8,726,136	10,109,045	10,109,045	1,326,017	15,476,948	57.3	27,770,187	18,029,723	5,563,648	10,807,120
	Dec. 12 mos.	4,150 \$2,534,746	2,931,882	10,083,836	13,410,190	11,660,443	11,660,443	2,938,192	3,743,237	278.6	18,038,948	9,297,387	9,206,169	1,606,282
	Dec. 12 mos.	4,166 \$2,701,067	38,055,065	130,210,498	28,182,954	32,624,727	32,624,727	2,932,340	41,449,751	85.5	18,906,720	6,177,613	8,156,216	22,300,395
Southern Railway	Dec. 12 mos.	6,484 \$1,817,698	4,381,734	17,577,961	2,599,681	17,119,540	17,119,540	261,964	6,622,997	155.6	9,767,220	10,393,930	284,508	3,334,927
Alabama Great Southern	Dec. 12 mos.	6,503 \$174,397,392	57,361,906	247,536,833	31,554,025	55,256,568	55,256,568	3,193,541	75,692,925	70.3	73,591,553	43,044,685	26,817,767	33,415,841
	Dec. 12 mos.	315	13,753,040	4,612,745	19,616,298	2,219,364	3,817,015	323,895	6,175,544	67.5	6,373,012	4,333,312	21,174	80,137
Cincinnati, New Orleans & Texas Pacific	Dec. 12 mos.	337 \$1,579,878	501,956	2,243,824	188,373	2,629,601	2,629,601	33,805	746,160	164.5	1,447,595	*1,452,042	23,849	402,808
Georgia Southern & Florida	Dec. 12 mos.	337 \$24,637,599	6,906,322	33,251,384	3,587,201	9,599,472	9,599,472	492,862	9,448,693	72.9	9,008,464	5,726,483	3,983,527	4,914,310
	Dec. 12 mos.	397	263,746	154,920	475,448	75,100	62,997	5,353	204,242	76.1	113,804	*42,489	117,907	161,142
	Dec. 12 mos.	397	3,341,909	2,662,134	6,626,341	855,386	892,986	38,593	2,146,257	63.3	2,434,999	1,196,175	825,443	809,423
New Orleans & Northeastern	Dec. 12 mos.	204 \$505,055	200,606	756,918	*13,908	484,120	484,120	11,665	208,711	96.5	26,341	*24,302	11,115	101,457
Southern Pacific	Dec. 12 mos.	204 \$8,648,917	2,392,135	11,658,120	1,480,404	1,804,514	1,804,514	165,793	2,884,797	58.4	4,852,326	2,936,763	1,039,710	1,196,002
	Dec. 12 mos.	8,247	320,548,066	108,914,723	471,674,332	71,921,685	108,586,534	8,041,991	159,131,836	124.6	97,385,369	*14,464,365	5,936,450	34,419,098
	Dec. 12 mos.	8,247	320,548,066	108,914,723	471,674,332	71,921,685	108,586,534	8,041,991	159,131,836	79.4	97,265,691	42,472,953	36,364,091	39,421,098
Texas & New Orleans	Dec. 12 mos.	4,322 \$5,043,329	2,175,921	7,898,250	1,735,754	1,861,608	1,861,608	175,307	2,530,879	85.2	1,171,661	*548,499	1,257,002	1,133,427
Spokane, Portland & Seattle	Dec. 12 mos.	4,326 \$85,888,298	24,875,042	118,588,062	17,827,746	17,827,746	17,827,746	1,920,961	34,454,573	64.7	41,867,546	21,034,585	14,661,749	13,025,499
	Dec. 12 mos.	944	805,614	300,849	1,210,892	1,549,494	476,235	15,207	609,587	223.9	1,500,188	119,290	1,678,950	165,217
	Dec. 12 mos.	944	21,377,250	2,011,083	24,774,933	8,889,155	3,515,364	171,625	7,460,713	84.0	3,959,138	1,638,385	461,429	3,935,992
Tennessee Central	Dec. 12 mos.	286 \$241,119	21,208	281,564	55,830	58,231	58,231	6,985	123,788	92.1	22,340	—5,033	13,111	—14,724
Texas & Pacific	Dec. 12 mos.	286 \$3,293,127	336,999	3,847,985	759,906	697,544	697,544	81,978	1,424,947	81.6	707,491	233,848	284,767	376,707
	Dec. 12 mos.	1,874	3,231,818	1,509,313	5,284,732	643,365	645,904	123,391	1,661,550	63.8	1,914,654	884,762	960,888	595,125
	Dec. 12 mos.	1,878	51,171,526	17,908,209	75,518,581	10,165,813	9,640,833	1,386,637	19,532,662	58.4	31,432,732	18,414,668	10,545,616	6,757,274
Texas Mexican	Dec. 12 mos.	162 \$126,241	636	144,722	78,806	16,928	16,928	5,355	55,774	119.2	27,755	19,001	—57,523	8,744
Toledo, Peoria & Western	Dec. 12 mos.	162 \$1,929,686	7,548	2,171,485	530,528	222,105	222,105	51,528	577,436	69.8	655,311	240,911	287,477	385,856
	Dec. 12 mos.	239	3,701,533	132	3,740,450	409,631	236,316	18	924,081	206.01	1,793,077	158	13,358	187,384
	Dec. 12 mos.	239	3,701,533	132	3,740,450	409,631	236,316	224,704	924,081	52.06	1,947,373	167,662	1,395,537	2,403,093
Union Pacific System	Dec. 12 mos.	9,777 \$15,804,932	8,561,371	27,689,334	6,649,306	13,564,833	13,564,833	831,812	13,152,127	130.4	8,406,725	*8,881,044	—432,191	2,320,983
Utah	Dec. 12 mos.	9,780 \$355,546,158	96,370,042	491,877,872	69,794,445	117,834,077	117,834,077	7,538,714	144,300,152	73.7	129,591,288	84,536,070	31,107,553	36,526,015
	Dec. 12 mos.	111	156,917	156,917	156,917	68,721	68,721	578	57,453	82.2	27,985	16,114	9,634	72,237
	Dec. 12 mos.	111	1,501,773	1,502,214	153,433	508,666	508,666	6,595	466,573	79.1	313,746	194,603	186,803	196,971
Virginian	Dec. 12 mos.	656 \$1,935,885	10,914	2,011,470	674,985	3,883,454	3,883,454	29,333	495,412	255.7	3,132,519	*2,479,504	—492,105	547,307
Wabash	Dec. 12 mos.	657 \$27,181,334	113,352	28,308,057	3,823,461	12,209,571	12,209,571	326,015	6,291,412	82.5	4,959,029	408,096	6,062,583	7,118,417
	Dec. 12 mos.	2,393	5,047,692	947,104	6,468,633	1,655,153	5,227,484	194,515	2,726,445	156.3	3,644,048	*4,309,532	312,091	1,009,832
	Dec. 12 mos.	2,393	75,263,086	10,240,562	91,077,915	13,387,310	16,569,300	2,159,266	30,287,307	72.0	25,533,041	12,342,729	8,533,909	9,277,432
Ann Arbor	Dec. 12 mos.	294 \$487,788	7,906	506,303	82,083	299,879	299,879	17,189	221,520	125.1	126,973	*70,756	*61,728	38,911
Western Maryland	Dec. 12 mos.	294 \$5,788,604	128,211	6,123,270	810,824	1,311,509	1,311,509	200,960	2,496,460	81.1	1,154,516	558,993	564,372	665,324
	Dec. 12 mos.	839	2,356,497	72,469	2,566,708	1,214,299	1,214,299	47,861	1,816,619	103.7	1,200,222	*1,200,778	1,197,699	696,191
	Dec. 12 mos.	840	32,653,480	515,051	34,169,276	5,222,304	7,911,648	569,720	9,372,004	71.1	9,868,047	3,525,222	7,147,584	7,005,936
Western Pacific	Dec. 12 mos.	1,195 \$1,863,676	1,075,076	3,085,608	1,951,637	6,475,682	6,475,682	128,820	1,518,776	338.6	7,363,160	*6,286,981	—1,302,712	2,597,864
Wheeling & Lake Erie	Dec. 12 mos.	1,195 \$46,681,588	9,618,318	58,313,695	9,441,548	14,117,353	14,117,353	1,154,112	16,991,469	75.9	14,036,807	6,383,545	5,202,283	10,333,606
	Dec. 12 mos.	505	1,522,812	1,522,812	1,522,812	342,601	342,601	46,699	670,664	88.7	176,494	*434,784	798,642	360,948
	Dec. 12 mos.	507	23,761,823	28	24,658,039	3,100,711	7,639,611	523,373	7,642,004	79.4	5,086,773	3,829,622	3,462,893	3,352,437
Wisconsin Central	Dec. 12 mos.	1,051 \$1,398,831	101,459	1,682,629	303,214	287,898	287,898	46,354	837,311	92.2	131,869	93,347	75,075	—57,222
	Dec. 12 mos.	1,116	18,317,435	1,130,045	21,317,591	3,485,747	3,647,489	508,731	8,540,755	79.6	4,355,825	2,256,950	1,614,456	2,771,817

\* Credit.

\* Credit.



# Takes *Toughest Test* in stride!

SHOWED 97.3% INCREASE IN GROSS TON MILES

HANDLED 21 TRAINS AT ONE TIME ON A 133-MILE STRETCH

MADE 19 NON-STOP MEETS IN 3½ HOURS

CUT FREIGHT-TRAIN TIME 2 HOURS ON A 107-MILE STRETCH\*

WHEN war came to the Denver & Rio Grande Western, centralized traffic control was an established procedure over critical territory on the line. At the war's end, the Rio Grande had built up their CTC systems to a total of 475 track miles — and had one of the longest CTC systems in the world.

G-R-S CTC helped the Rio Grande establish more than one record in the mountainous territory it runs through. It helped them lick a 59 per cent increase

in train miles. It handled a 97.3 per cent average increase in traffic load. And it helped save equipment by enabling lighter engines to pull heavier trains, with an average over-all productivity increase of 16 per cent!

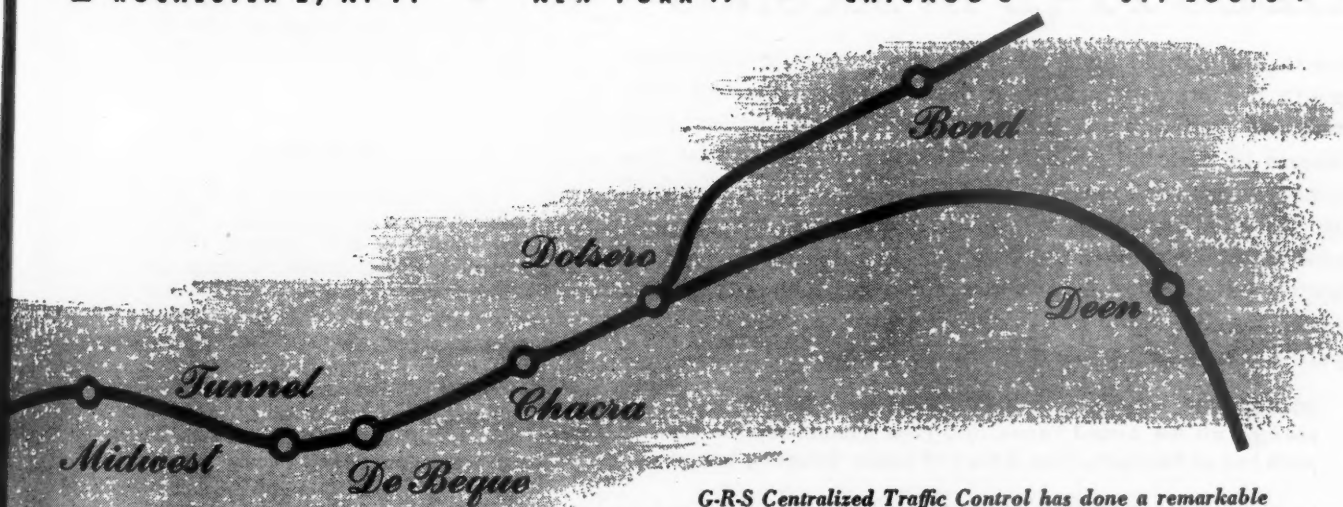
G-R-S engineers can show you, specifically, how quickly CTC can pay for itself by an engineering survey of your road conditions. Call or write to our nearest district office.

*\*Figures from reports in Railway Age and Railway Signaling.*



## General Railway Signal Company

ROCHESTER 2, N. Y. • NEW YORK 17 • CHICAGO 3 • ST. LOUIS 1



G-R-S Centralized Traffic Control has done a remarkable job in helping the Rio Grande to speed up operations through some of the nation's most rugged country. In 1944 the last gap was closed between Agate and Grand Junction, giving 284 road-miles of CTC between Dotsero, Col. and Helper, Utah.

A-3109



#### FOUR MOVES— FIRE UNDER CONTROL

1. Remove Safety Pin.
2. Pick up portable by carrying handle.
3. Close hand on Squeeze-Grip.
4. Aim horn at fire—It's out in seconds!

## Positive SQUEEZ-GRIP KILLS FIRE in seconds

Here in four simple hand movements we come to grips with modern fire protection. Carbon dioxide gas, the fastest non-damaging fire extinguishing agent, is stored under high pressure in portable cylinders. The rapid release of the fire killing gas with the new SQUEEZ-GRIP valve saves time and gas. There is no wheel to turn. No need to set the cylinder down to operate it. C-O-TWO gas can be discharged or stopped as quickly as you can close or open your hand. In fact, it's so easy to use that even a woman or a child can operate it and extinguish a fire in seconds.

SQUEEZ-GRIP, originated and developed by C-O-TWO, is now used by all the Armed Forces. C-O-TWO manufactures a complete line of Portables, Hose Units and Smoke Detecting Systems.

**KILLS FIRE—SAVES LIVES—It's Safer—It's Faster—It's Modern**

### C-O-TWO FIRE EQUIPMENT COMPANY

NEWARK 1

NEW JERSEY

Sales and Service in the Principal Cities of United States and Canada

AFFILIATED WITH PERENE MANUFACTURING COMPANY

#### Trade Publications

*Your Unseen Friend—Nickel.* Published by the International Nickel Company, 67 Wall Street, New York 5, N. Y.

For 25 years this company has carried on an active and consistent program in the history of metallurgical research, customer service, advertising and sales promotion directed to the point of sale. Its objective has been to assist Inco customers to build their markets by proper use of nickel and nickel alloys, and to give their customers a better appreciation of these metals and products containing them. This booklet outlines three advertising themes featured by Inco, namely, "A Just and Durable Peace" in 1943, "Postwar Job Opportunities" in 1944 and "Nickel's Role in Postwar Production" in 1945. Five other Inco customer services are also outlined—advertising in industrial and trade journals and catalogs, direct mail activities, exhibits at industrial shows, industrial and educational motion pictures and development and research activities.

*The A B C of Work Simplification in Office Operations*, 17 pages, illustrations. Published by the Standard Register Company, Dayton 1, Ohio. Free.

Many people are familiar with the near-miracles accomplished by work simplification in factory production lines, both before and during the war. However, there is less familiarity with the opportunity for applying work simplification to office work. This booklet outlines several important phases of work simplification as applied to office procedures and paperwork. With the question of improved office procedure receiving increased attention today, this and other of the company's publications may prove helpful, though they were not written with the railroads' problems exclusively in mind.

One of these entitled "Do Your Plans Call for Crossing This New Frontier in Business" suggests a scientific approach to the question of handling office routine, with the objective of simplifying operations to achieve more efficient control of production processes, with the elimination of lost motion and expense.

#### Pamphlets

*The Transportation Corps in the European Theatre of Operations.* Printed by the Historical and Technical Information Branch, Headquarters, Theatre Service Forces European Theatre, Office of the Chief of Transportation, United States Army, APO 887, c/o Postmaster, New York.

This presentation, a sheet 35 inches square, is a graphic history of the Transportation Corps in the European Theatre of Operations. It is comprised of four illustrative maps in color, each pertaining to a different phase of the Transportation Corps operations in Europe. The first covers the D-Day armada carried; the second, the rush across France; the third, hammering to the Rhine; and the fourth, across the Reich to victory. Each is accompanied by a short commentary on freight traffic and troops handled during the operations.



*The Railway Handbook, 1945-1946, compiled under the direction of the Editor of "The Railway Gazette," 120 pp. Published by the Railway Publishing Company Limited, 33 Tothill Street, Westminster S. W. 1, England. Price, 4 shillings.*

The aim of this handbook, which was first published in 1934, is to provide the railway student with a collection of useful statistics and other information at low price. Apart from tables giving international comparisons, the data are confined mainly to Great Britain and Ireland. The data appearing in this handbook are also incorporated in the "Universal Directory of Railway Officials and Railway Year Book."

### Periodical Articles

*Wage Rates and "Relative Economy and Fitness" in the Transportation Industry, by Dan H. Mater. The Journal of Business of the University of Chicago, October, 1945, pp. 183-208.*

The author contends that an important factor in determining the place which kind of carrier should occupy in the transportation field is its respective freight-rate level and structure; and one of the important determinants of the general level of freight rates of each kind of carrier is the wage-rate structure. He, therefore, discusses in this article the wage rates paid in the motor truck, motor coach, water carrier and railroad industries. Included are numerous tables and charts which help to clarify the text. The article is based on the U. S. Board of Investigation and Research study "Hourly Remuneration Rates by Occupations in the Transportation Industry". This study was made under the supervision of Mr. Mater.

*Economy in Heavier Freight Car Loading, by N. W. Kendall. Domestic Commerce, February, 1946, pp. 33-35 and 37.*

The results obtained with heavier loading during the war would indicate that it be continued, provided some method of making it attractive to shippers and receivers of freight and the railroads be found. This article discusses, for the most part, the advantages and disadvantages of the plan of providing alternative rates with alternative minimum carload weights.

TOY RAILROADING is in for a boom, according to the magazine "Pathfinder," which predicts an \$8 million business during 1946, with more to come when material and labor problems clear up. William K. Walther, Inc., Milwaukee, expects to build upwards of 10,000 locomotives this year . . . started business in 1932 on \$500, and last year did a \$200,000 business. Mr. Walther believes that youngsters go in chiefly for model airplanes but that there are some 50,000 oldsters who have taken to railroading. Average hobbyist, over a period of time, will spend several hundred dollars on his railroad, he says, and the biggest buyers are model railroad clubs and cooperatives, some with outfits costing up to \$25,000.



## ABC statement of Material Handling Facts for Busy Railroad Executives

Most railroad men are aware of the many advantages of mechanizing handling of material in railroad stores, yards, mechanical departments, baggage rooms, freight terminals, etc. The basic facts outlined below deserve the consideration of any executive concerned with this problem.



### THE CASE FOR POWER INDUSTRIAL TRUCKS

1. **They conserve manpower.** One operator with a power truck can do the work of 6-10 men with hand trucks.
2. **They conserve time.** Besides speeding transportation of material, they load and unload cars faster, and save time on many other handling operations.
3. **They conserve space.** Fork trucks, Hy-Lift trucks, and crane trucks can tier material to make floor space more valuable.
4. **They promote safety** by eliminating the strained backs, hernias, crushed fingers or toes and other accidents resulting from manual lifting.
5. **They speed maintenance.** In roundhouse and repair shop they make simple work of removing and applying heavy parts on cars and locomotives.
6. **They are flexible.** Not limited by cranes or tracks, they can operate anywhere—indoors and out—wherever needed.



### THE CASE FOR ELECTRIC POWER INDUSTRIAL TRUCKS

1. **Continuous Operation.** Always dependable—always on the job, electric trucks are built for long, hard service. Changing batteries takes less time than changing oil or re-fueling non-electric trucks.
2. **Lowest Maintenance Cost.** Case histories show that with proper care, Baker Trucks can cost their owners as little as \$50 per year for maintenance and repair.
3. **Lowest Operating Cost.** Electric power is the cheapest power available for heavy duty industrial truck operation—even with cost of battery depreciation.
4. **Lowest Investment Cost**—when amortized over their many years of useful service. Most electric trucks are still going strong after 15 to 20 years of strenuous service.
5. **Maximum Safety.** Electric power is safe power—free from excessive heat, noxious fumes, and dangers of explosion or fire.
6. **Most Efficient Performance.** Smooth starting—powerful acceleration—more positive control—no gear shifting—these are some of the operating advantages of electric trucks.



### THE CASE FOR BAKER INDUSTRIAL TRUCKS

1. **Complete Line** for every type of industrial truck handling system. In addition to standard Low-Lift, Hy-Lift, Fork, Crane, and Platform Trucks, Baker makes tractors and a wide variety of special trucks for unusual handling operations. For example, a Baker Fork Truck, with special attachment, mechanizes railroad "wheel handling."
2. **Baker Representatives** in all principal industrial centers are qualified material handling engineers, available for counsel on your material handling requirements. They will help you select the proper equipment for your needs.
3. **Baker Engineering and Service** are dedicated to the continuous operation of all Baker Trucks. Adequate stocks of spare parts are maintained to meet emergencies. Baker representatives are available for consultation and help at all times and factory engineers make periodic field trips throughout the country to insure satisfactory operation and to recommend proper truck care.
4. **Baker Motors** on all Baker Trucks are designed and built by Baker, to give greatest efficiency for their specific functions. Baker Travel Motors develop more horsepower and contain more copper and iron than any other motors of the same size.
5. **Baker Power Axle.** Careful selection of properly heat-treated steels, plus many exclusive design features, practically eliminate service failures and greatly reduce maintenance.
6. **Baker Duplex Compensating Suspension**—an exclusive Baker feature which holds power axle in alignment, and prevents twisting strains due to rough floor conditions from being transmitted to frame or steering rods.

These are a few of the advantages offered by Baker Electric Power Industrial Trucks. For further information, call in your nearest Baker representative, or write us direct.



Member:  
Electric Industrial  
Truck Association

**BAKER INDUSTRIAL TRUCK DIVISION**  
of The Baker-Raulang Company  
2172 West 25th Street • Cleveland, Ohio  
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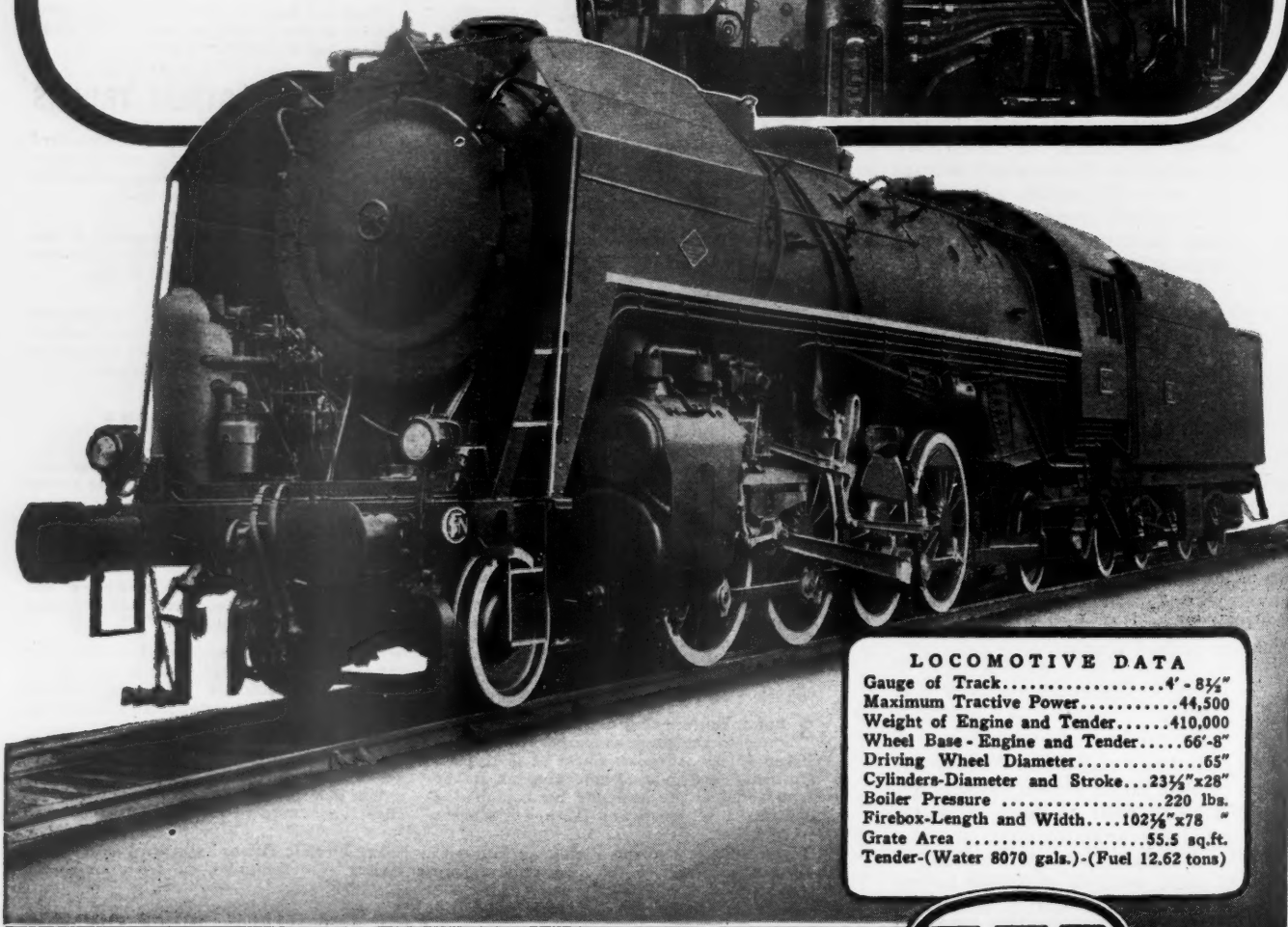
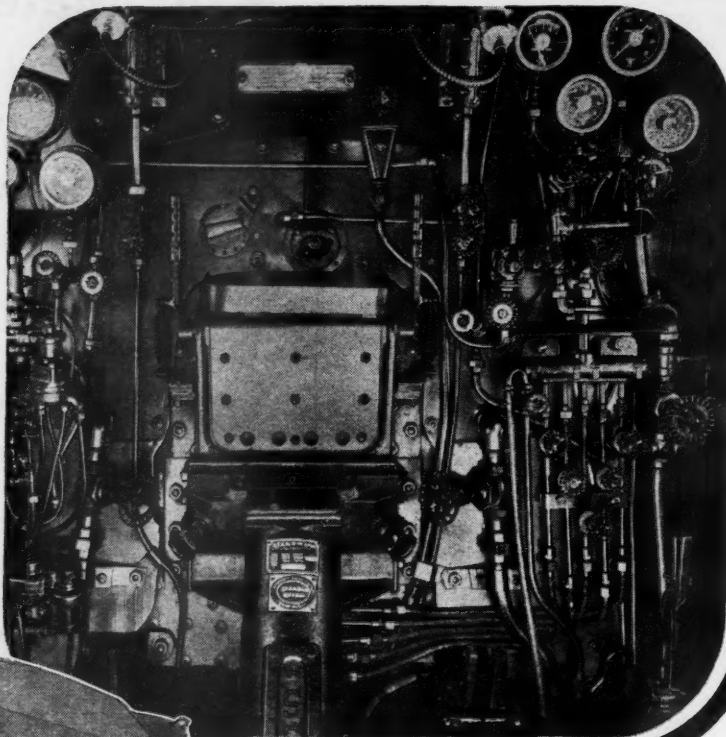
# Baker INDUSTRIAL TRUCKS

## A STANDARD STOKER IN THE CAB-*Maximum Power* AT THE RAILS

### French National Railways' Fleet of 1340 2-8-2's STANDARD STOKER FIRED

FOR several years prior to World War II the French National Railways were following a program of installing stokers on new and existing locomotives. This program was initiated only after exhaustive tests had demonstrated that definite savings in fuel could be effected and at the same time maximum power made available at the rails. In view of past performance records, Standard HT-1 Stokers were specified for the entire fleet of 2-8-2 locomotives; in addition a French type firedoor was furnished by The Standard Stoker Co., Inc.

The new locomotives already delivered are currently helping to restore French Railway transportation facilities to a point where their home economy may again function at a near normal level.



#### LOCOMOTIVE DATA

Gauge of Track.....	4' - 8½"
Maximum Tractive Power.....	44,500
Weight of Engine and Tender.....	410,000
Wheel Base - Engine and Tender.....	66'-8"
Driving Wheel Diameter.....	65"
Cylinders-Diameter and Stroke....	23½"x28"
Boiler Pressure .....	220 lbs.
Firebox-Length and Width....	102¼"x78"
Grate Area .....	55.5 sq.ft.
Tender-(Water 8070 gals.)-(Fuel 12.62 tons)	

**THE STANDARD STOKER COMPANY, INC**  
NEW YORK • CHICAGO • ERIE • MONTREAL

